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Good Luks
Everiwun!

By-Gaahl

Exam A

QUESTION 1
You are developing an application for a client residing in Hong Kong. You need to display negative currency values by using a minus sign.
Which code segment should you use?

A. NumberFormatInfo culture = new CultureInfo("zh-HK").NumberFormat; culture.NumberNegativePattern = 1;
return numberToPrint.ToString("C", culture);
B. NumberFormatInfo culture = new CultureInfo("zh-HK").NumberFormat; culture.CurrencyNegativePattern = 1;
return numberToPrint.ToString("C", culture);
C. CultureInfo culture = new CultureInfo("zh-HK");
return numberToPrint.ToString("()", culture);
D. CultureInfo culture = new CultureInfo("zh-HK");
return numberToPrint.ToString("()", culture);

Answer: B
Section: (none)

Explanation/Reference:
Explanation: Use CurrencyNegativePattern property set to 1 to display negative currency values with a minus sign.

A will give a minus sign for negative numbers but not for negative currencies.

C & D The culture has not been to display a minus sign for currency.

· ACHTUNG FALLE
· CurrencyNegativePattern und NICHT NumberNegativePattern (wirkt sich nicht auf "C" aus) !!!

QUESTION 2
You create an application that stores information about your customers who reside in various regions.
You are developing internal utilities for this application. You need to gather regional information about your customers in Canada.
Which code segment should you use?

A. foreach (CultureInfo culture in CultureInfo.GetCultures(CultureTypes.SpecificCultures)) {
// Output the region information...}
B. CultureInfo cultureInfo = new CultureInfo("CA");
// Output the region information...
C. RegionInfo regionInfo = new RegionInfo("CA");
// Output the region information...
D. RegionInfo regionInfo = new RegionInfo("");
if (regionInfo.Name == "CA") {
// Output the region information...}

Answer: C
Section: (none)

Explanation/Reference:
Explanation: The RegionInfo class can be used to get information about a region.

A & B CultureInfo is used to control formatting, sorting & comparing of culture sensitive data. E.g currencies, calendar dates etc.

D Does not initialise the RegionInfo object correctly i.e to Canada.

· Land immer RegionInfo !!!

QUESTION 3
You are developing a method that searches a string for a substring.
The method will be localized to Italy.
Your method accepts the following parameters: The string to be searched, which is named searchList
The string for which to search, which is named searchValue You need to write the code.
Which code segment should you use?

A. return **searchList.IndexOf(searchValue)**;
B. CompareInfo comparer = new CultureInfo("it-IT").CompareInfo;
return **comparer.Compare(searchList, searchlist, searchValue)**;
C. Culture comparer = new CultureInfo("it-IT");
if (**searchList.IndexOf(searchValue)** > 0) {
return true;
}
else {
return false;
}
D. CompareInfo comparer = new CultureInfo("it-IT").CompareInfo;
if (**comparer.IndexOf(searchList, searchValue**) > 0) {
return true;
}
else {
return false;
}

Answer: D
Section: (none)

Explanation/Reference:
· CompareInfo implementiert eine Reihe von Methoden für kulturabhängige Zeichenfolgenvergleiche.

· A keine Berücksichtigung von Italy

· B CompareInfo ist richtig, aber die Methode Compare vergleicht zwei strings und ist in der hier gezeigten Variante nicht möglich

· C so gehts nicht (ausserdem wird comparer nicht weiter verwendet)

· D die IndexOf Methode von CompareInfo ist genau das gesuchte !!! RICHTIG

QUESTION 4
You need to generate a report that lists language codes and region codes.
Which code segment should you use?

A. foreach (CultureInfo culture in
CultureInfo.GetCultures(CultureTypes.SpecificCultures)) {
// Output the culture information...}

B. CultureInfo culture = new CultureInfo("");
CultureType types = culture.CultureTypes;
// Output the culture information...

C. foreach (CultureInfo culture in
CultureInfo.GetCultures(CultureTypes.NeutralCultures)) {
// Output the culture information...}

D. foreach (CultureInfo culture in
CultureInfo.GetCultures(CultureTypes.ReplacementCultures)) {
// Output the culture information...}

Answer: A
Section: (none)

Explanation/Reference:
Explanation: CultureTypes.SpecificCultures will filter all language codes that are specific to a country\region.

B The CultureInfo object created is not associated with any cultures.

C will yield only neutral cultures, they will not be specific to a country\region.

D Replacement cultures are user-defined custom cultures.

· CultureTypes.SpecificCultures - Lдnder- bzw. Regioninformationen.

QUESTION 5
You are developing a fiscal report for a customer.
Your customer has a main office in the United States and a satellite office in Mexico.
You need to ensure that when users in the satellite office generate the report, the current date is displayed in Mexican Spanish format.
Which code segment should you use?

A. DateTimeFormatInfo dtfi = new CultureInfo("es-MX",false).DateTimeFormat;
DateTime dt = new DateTime(DateTime.Today.Year, DateTime.Today.Month, DateTime.Today.Day);
string dateString = dt.ToString(dtfi.LongDatePattern);

B. Calender cal = new CultureInfo("es-MX",false).Calender;
DateTime dt = new DateTime(DateTime.Today.Year,DateTime.Today.Month,DateTime.Today.Day);
string dateString = dt.ToString();

C. string dateString = DateTimeFormatInfo.CurrentInfo.GetMonthName(DateTime.Today.Month);

D. string dateString = DateTime.Today.Month.ToString("es-MX")

Answer: A
Section: (none)

Explanation/Reference:
Explanation: Create a Mexican Spanish CultureInfo object. Convert the date to a string using the DateTimeFormatInfo returned by the CultureInfo object.
B does not use the CultureInfo object to convert the date to a string.
C does not use the Mexican Spanish culture.
D the DateTime.ToString() method cannot take a string code representation of the culture.

QUESTION 6
You are developing a .NET Framework 2.0 Windows Forms application on Certkiller -WS554.
The Windows Forms application will be used by regional offices of Certkiller .com in various countries.
You are required to customize the application so that the language, calendar and cultural conventions are

changed
based on the user's operating system settings.
You additionally are required to identify the .Net Framework class that should be used for this requirement.
What should you do?

A. The CultureInfo class should be used
B. The TextInfo class should be used
C. The DateTimeFormtaInfo should be used
D. The CharUnicodeInfo should be used
E. The RegionInfo should be used

Answer: A
Section: (none)

Explanation/Reference:
The CultureInfo class should be used in the scenario because it contains culture- specific information and provides the information required for performing culture-specific operations like changing casing, formatting dates and
numbers and comparing strings.

Incorrect Answers:
B: This class should not be used in the scenario because this class only affects the behavior such as text casing.
C: This class should not be used in the scenario because this class only defines how the Date and Time values are formatted.
D: This class should not be used in the scenario because this class is used to only retrieve information about a Unicode character.
E: This class should not be used in the scenario because this class does not represent any preferences of the user and does not depend upon the culture.

· CulureInfo
· Stellt Informationen zu einer bestimmten Kultur bereit, z. B. den Namen der Kultur, das Schriftsystem, den verwendeten Kalender sowie Informationen zum Formatieren von Datumsangaben und Sortieren von Zeichenfolgen.

· Nicht RegionInfo - Enthält (NUR) Informationen über das Land bzw. die Region.

QUESTION 7
You are developing a .NET Framework 2.0 Windows Forms application on Certkiller -WS554.
The application must provide support for multiple languages and regional differences.
You are required to define a custom culture based on an existing culture and region.
An administrative user will install the custom culture on the end user's computer prior to the applications deployment
and you are required to select which class to use.
What should you do?

A. The CultureAndRegionInfoBuilder class should be used
B. The CustomAttributeBuilder class should be used
C. The RegioInfo class should be used
D. The CultureInfo class should be used

Answer: A
Section: (none)

Explanation/Reference:

The correct option in the scenario would be to make use of the CultureAndRegionInfoBuilder class as this class is used to define a custom culture that is new or based upon an existing region and culture.

Incorrect Answers:
B: This class should not be used in the scenario because this class is used to define custom attributes which are used to associate declarative information.
C: This class should not be used in the scenario because this class is used to access the region data for an already installed culture.
D: This class should not be used in the scenario because this class can only be used to make use of cultures that have already been installed.

· CultureAndRegionInfoBuilder

QUESTION 8
You need to provide locale-specific services to employees with the application.
You must additionally ensure that you use a unique country identifier that can be used as a key to access a database record that contains specific information about a country whilst you use the minimum storage for storing the key.
What should you do?

A. CultureInfo.Name should be used as an identifier for a country
B. CultureInfo.GetHashCode should be used as an identifier for a country
C. RegionInfo.GetHashCode should be used as an identifier for a country
D. RegionInfo.Name should be used as an identifier for a country

Answer: D
Section: (none)

Explanation/Reference:
Explanation: In the scenario you should make use of the RegionInfo.Name property as this property gets the name or ISO 3166 two-letter country/region code for the current RegionInfo object.
Incorrect Answers:
A: This method should not be used in the scenario as you will only receive the culture name instead of the country name and does not meet the objective. B, C: The usage of the GetHashCode property in the scenario is incorrect as the hash value generated can be used to tell whether the RegionInfo or CultureInfo objects are the same or not.

· Land - Region und Eigenschaft Name

· HashCode geht nicht, da keine Information ob RegionInfo oder CulturInfo

QUESTION 9
You create the following variable in your code:
DateTime dateValue;

You additionally write code to store time in the local time to the dateValue variable.
You are required to serialize the value of the dateValue variable, if you serialize the DateTime object in one time zone and deserialized in a different time zone,
the local time represented as a result should be automatically adjusted to the second time zone.
You are to decide which expression to use.
What should you do?

A. The dateValue.ToString("yyyy-MM-ddTHH:mm:ss.fffffff",CultureInfo.InvariantCulture)
B. The dateValue.ToBinary() expression should be used

C. The dateValue.Kind expression should be used
D. The dateValue.Ticks expression should be used

Answer: B
Section: (none)

Explanation/Reference:
To preserve the information that you are required to preserve in the scenario you should make use of the new ToBinary and FromBinary method as these methods can be used to automatically adjust the local times.

Incorrect Answers:
A: The expression in question should not be used in the scenario because the expression will not preserver any of the required reserved information.
C: This expression will be used to check whether the value indicates whether time is represented by the instance is based on local time.
D: This expression is used to super fast serialize the required information but should not be considered when working with the local time.

· ToBinary und FromBinary - ist das nicht toll ?

QUESTION 10
You are developing a .NET Framework 2.0 Windows Forms application that will be used by several Certkiller .com employees in several countries on a workstation used as collateral.
The application is required to fully support customization of the user interface based on the user's preferences like the language currency and date and time formats.
You are required to write code that will compare the name of two employees which are stored in variables named employee1 and employee2.
You are required to ensure correct comparisons whilst taking care of the regional settings selected.
What should you do?

A. The String.Compare(Fileemployee1, Fileemployee2, true,CultureInfo.**CurrentCulture**) segment should be used
B. The String.Compare(Fileemployee1, Fileemployee2, true,CultureInfo.**InvariantCulture**) segment should be used
C. The String.Compare(Fileemployee1, Fileemployee2, true,CultureInfo.**InstalledUICulture**) segment should be used
D. The String.Compare(Fileemployee1, Fileemployee2, true,CultureInfo.**CurrentUICulture**) segment should be used

Answer: A
Section: (none)

Explanation/Reference:
The default behavior of the segment in question is to perform culture-sensitive comparisons and should definitely be considered for use in the scenario.

Incorrect Answers:
B: This code segment is incorrect and should not be used in the scenario because it will lead to culture-insensitive operations.
C: This code segment is incorrect and should not be used in the scenario because this will used the culture that is installed with the operating system.
D: This code segment is incorrect and should not be used in the scenario because this settings only used for changing the user's interface culture used by a thread.

QUESTION 11
You are developing a large .NET Framework 2.0 application that is required to provide support for culture-specific information.
You are required to parse a date and time string generated for a custom culture and to help the success of the parse operation
you designate parse patterns that tare likely to succeed.
You must additionally prevent the operation from failing whilst you select the method to use for parsing the string.
What should you do?

A. The ParseExact method should be used
B. The Parse method should be used
C. The TryParseExact method should be used
D. The TryParse method should be used

Answer: C
Section: (none)

Explanation/Reference:
The TryParseExact method should be used if you require parsing a date and time string generated from a custom culture.

Incorrect Answers:
A, B: The usage of these methods in the scenario would be incorrect because the methods do not provide error handling
and the custom culture can be complicated and difficult to parse.
D: If you decide to use the TryParse method which attempt to parse a string using several implicit parse patterns
that may all fail you will not achieve the scenario objective.

· TryParse ist immer besser als Parse.
· ES GIBT TryParseExact !!!

· Konvertiert die angegebene Zeichenfolgenentsprechung einer Datums- und Uhrzeitangabe unter Verwendung der Angaben über Format, kulturabhängige Formatierungsinformationen und Stil in die entsprechende DateTime. Das Format der Zeichenfolgenentsprechung muss dem angegebenen Format genau entsprechen.

QUESTION 12
You are developing a utility screen for a new client application.
The utility screen displays a thermometer that conveys the current status of processes being carried out by the application.
You need to draw a rectangle on the screen to serve as the background of the thermometer as shown in the exhibit.
The rectangle must be filled with gradient shading.
Which code segment should you choose?
Exhibit:

A.
```
Rectangle rectangle = new Rectangle(10, 10, 450,25);
LinearGradientBrush rectangleBrush = new LinearGradientBrush(rectangle, Color.AliceBlue, Color.
CornflowerBlue,LinearGradientMode.ForwordDiagonal);
Pen rectanglePen = new Pen(rectangleBrush);
Graphics g = this.CreateGraphics();
DrawRectangle(rectanglePen, rectangle);
```

B. Rectangle rectangle = new Rectangle(10, 10, 450,25);
LinearGradientBrush rectangleBrush = new LinearGradientBrush(rectangle, Color.AliceBlue, Color.
CornflowerBlue,LinearGradientMode.ForwordDiagonal);
Pen rectanglePen = new Pen(rectangleBrush);
Graphics g = this.CreateGraphics();
FillRectangle(rectangleBrush, rectangle);

C. RectangleF rectangle = new RectangleF(10f, 10f, 450f,25f);
Point[] points = new Point[] {new Point(0, 0), new Point(110, 145)};
LinearGradientBrush rectangleBrush = new LinearGradientBrush(rectangle, Color.AliceBlue, Color.
CornflowerBlue,LinearGradientMode.ForwordDiagonal);
Pen rectanglePen = new Pen(rectangleBrush);
Graphics g = this.CreateGraphics();
DrawPolygon(rectanglePen, points);

D. RectangleF rectangle = new RectangleF(10f, 10f, 450f,25f);
SolidBrush rectangleBrush = new SolidBrush(Color.AliceBlue);
Pen rectanglePen = new Pen(rectangleBrush);
Graphics g = this.CreateGraphics();
DrawRectangle(rectangleBrush, rectangle);

Answer: B
Section: (none)

Explanation/Reference:
Explanation: Create a LineGradientBrush and supply to the FillRectangle() method of the graphics object.

A DrawRectangle() will draw the outline of a rectangle without filling it.
C draws an unfilled Polygon.
D Uses a SolidBrush and will not achieve the desired gradient fill

· LineGradientBrush und FillRectangle()

QUESTION 13
You are developing a .NET Framework 2.0 application that will be used to manipulate graphics files in GIF, JPG and PNG formats.
You are required to choose an appropriate data type to store graphic files whilst your solution must use the least amount of code.
What should you do?

A. The Icon class should be used
B. The Metafile class should be used
C. The Image class should be used
D. The Bitmap class should be used

Answer: D
Section: (none)

Explanation/Reference:
Because the Bitmap class is an implementation of the Image abstract class that is capable of working with several types of image formats this class should be considered for usage in the scenario.

Incorrect Answers:
A: This class should not be used in the scenario because the Icon class only allows you to work with small bitmap images.
B: This class should not be used in the scenario because this class can not be used to manipulate images in different formats.

C: This class should not be used in the scenario because this class is an abstract class which requires functionality to be implemented which requires programming effort.

· Bitmap

· Icon zu spezialisiert
· Metafile ist nur für die Metadaten einer Grafik und den damit verbundenen M□glichkeiten zust□ndig.
· Image ist eine abstrakte Klasse

QUESTION 14
Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are in the process of storing numerical values up to 2,100,000,000 into a variable and may require storing negative values using a .NET Framework 2.0 application.
You are required to optimize memory usage
What should you do?

A. Int32
B. UInt16
C. UInt32
D. Int16

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The Int32 type should be used in the scenario as it can be used to store positive and negative numerical values from -2,147,483,648 to +2,147,483,647.

Incorrect Answers:
B, C: The UINT32 and UInt16 type should not be used in the scenario because they are used to store only unsigned positive numbers.
D: The Int16 type should not be used as you will only be allowed to store values from -32768 to +32768.

QUESTION 15
You are currently in the process of creating a class that stores data about Certkiller .com's customers. Certkiller.com customers are assigned unique identifiers and various characteristics that may include aliases, shipping instructions, and sales comments.
These characteristics can change in both size and data type. You start by defining the Customer class as shown below:
public class Customer{
private int custID;
private ArrayList attributes;
public int CustomerID {

A. Use the following code to declare the FindAttribute method:
 public T FindAttribute (T att){
 //Find attribute and return the value
 }
B. Use the following code to declare the FindAttribute method:
 public object FindAttribute (object att){
 //Find attribute and return the value
 }

C. Use the following code to declare the FindAttribute method:
```
public T FindAttribute <T> (T att){
//Find attribute and return the value
}
```
D. Use the following code to declare the FindAttribute method:
```
public string FindAttribute (string att){
//Find attribute and return the value
}
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This code declares the method FindAttribute and specifies an argument named att using the T placeholder as the argument and return data type. To ensure the FindAttribute method accepts arguments of different types, you should specify an argument using a generic placeholder. The argument att in this generic method will accept any valid data type and ensures type-safety by returning that same data type.

Incorrect Answers:
A: You should not use this code because it does not declare the placeholder T. when declaring a generic method, you have to use the < > bracketsto declare the place holder before using it.
B: You should not use this code because it does not guarantee type-safery.
D: You should not use this code because it will only accept a string argument and return a string argument.

QUESTION 16
You are creating a custom exception class named ProductDoesNotExistException so that custom exception messages are displayed in a new application when the product specified by users is unavailable.
This custom exception class will take the ProductID as an argument to its constructor and expose this value through the ProductID.
You are now in the process of creating a method named UpdateProduct.
This method will be used to generate and manage the ProductDoesNotExistException exception if the ProductID variable contains the value 0.
You need to ensure that use the appropriate code for the UpdateProduct method.
What should you do?

A. Make use of the following code:
```
public void UpdateProduct (){
try{
if (ProductID == 0)
throw new ProductDoesNotExistException (ProductID);
}
catch (ProductDoesNotExistException ex){
MessageBox.Show ("There is no Product" + ex. ProductID);
}
}
```
B. Make use of the following code:
```
public void UpdateProduct (){
try{
if (ProductID == 0)
throw new Exception ("Invalid ProductID");
}
catch (ProductDoesNotExistException ex){
MessageBox.Show (ex.Message);
}
}
```

C. Make use of the following code:
```
public void UpdateProduct (){
if (ProductID == 0)
throw new ProductDoesNotExistException (ProductID);
}
```
D. Make use of the following code:
```
public void UpdateProduct (){
if (ProductID == 0)
throw new Exception ("Invalid ProductID");
}
```

Answer: A
Section: (none)

Explanation/Reference:
Explanation: This code verifies the value of the ProductID variable by using the if statement. If the ProductID variable contains a value of 0, this code generates an exception of type ProductDoesNotExistException. To explicitly generate an exception, you are required to use the throw statement. The exception generated by using the throw statement can be handled by the try...catch block. This code generates the custom exception by calling the constructor of the custom exception class named ProductDoesNotExistException. The constructor argument is the ProductID attached to the ProductDoesNotExistException object. This code then handles the custom exception named ProductDoesNotExistException by using a catch block, which handles exceptions by using a variable named ex of the type ProductDoesNotExistException. This code displays the "There is no Product" error message by using the MessageBox.Show method and concatenating the ex.ProductID to it.

Incorrect Answers:
B: You should not use the code that generates an exception of the type Exception and handles the exception of the type ProductDoesNotExistException in the catch block. This code is incorrect because you are required to generate a custom exception named ProductDoesNotExistException.
C, D: You should not use the codes that do not use a try...catch block because the application an unhandled exception.

· Falle:
· Angabe ... generate and manage the ProductDoesNotExistException ...
· Sonst hätte ich Antwort C verwendet !!!

QUESTION 17
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You have recently finished development of a class named TestReward and package the class in a .NET 2.0 assembly named TestObj.dll.
After you ship the assembly and it is used by client applications, you decide to move the TestReward class from TestObj.dll assembly to the TestRewardObj.dll Assembly. You are to ensure when you ship the updated TestObj.dll and TestRewardObj.dll assemblies that the client
applications continue to work and do not require recompiling.
What should you do?

A. The TypeForwardedTo attribute should be used
B. The TypeConvertor.ConvertTo method should be used
C. The InternalsVisibleTo attribute should be used
D. The Type Convertor.ConvertFrom method should be used

Answer: A
Section: (none)

Explanation/Reference:

Explanation: The statement used for you to add a type from one assembly into another assembly is the TypeForwardTo attribute which enables you not to have the application recompiled.

Incorrect Answers:
B, D: The TypeConverter class provides a unified way of converting different types of values to other types and can not be used to move a type.
C: The method in question here specifies all nonpublic types in an assembly are visible to other assemblies but can not be used to move types.

QUESTION 18
You have recently created a custom collection class named ShoppingList for a local supermarket.
This custom class will include ShoppinItem objects that have the public properties listed below.
* Name
* AisleNumber
* OnDiscount
You are required to enable users of your class to iterate through the ShoppingList collection, and to list each product name and aisle number using the foreach statement.
You need to achieve this by declaring the appropriate code.
What code should you use?

A. public class ShoppingList : ICollection {
 // Class implementation
 }
B. public class ShoppingList : IEnumerator, IEnumerable{
 // Class implementation
 }
C. public class ShoppingList : Ilist{
 // Class implementation
 }
D. public class ShoppingList : Enum {
 // Class implementation
 }

Answer: B
Section: (none)

Explanation/Reference:
Explanation: You should implement the IEnumerable and IEnumerator interfaces of the System.Collections namespace to ensure that your collection class supports foreach iteration. The IEnumerable interface defines only one method named GetEnumerator that returns an object of type IEnumerator of the

System.Collections namespace and is used to support iteration over a collection. The IEnumerator interface supports methods, such as Current, MoveNext, and Reset to iterate through a collection. The Current method returns the current element of the collection. The Move method positions the enumerator to the next available element of the collection. The Reset method positions the enumerator before the first element of the collection.

Incorrect Answers:
A: You should not use the code that implements the ICollection interface because this interface is used to define properties in a collection. Implementing this interface will not ensure that your collection class supports foreach iteration because it does not inherit the IEnumerator interface.
C: You should not use the code that implements the Ilist interface because this interface is used to define properties of a non-generic list of items accessed by index. Implementing this interface will not ensure that your collection class supports foreach iteration because it does not inherit the IEnumerator interface.
D: You should not use the code that inherits the Enum because this structure is used

QUESTION 19
You are developing a .NET Framework 2.0 application used to store a type-safe list of names and e-mail addresses.
The list will be populated all at ones from the sorted data which means you well not always need to perform insertion or deletion
operations on the data.
You are required to choose a data structure that optimizes memory use and has good performance.
What should you do?

A. The System.Collections.Generic.SortedList class should be used
B. The System.Collections.HashTable class should be used
C. The System.Collections.Generic.SortedDictionary class should be used
D. The System.Collections.SortedList class should be used

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The SortedList generic class should be used in the scenario class as it provides type safety compared against the System.Collections.SortedList class.

Incorrect Answers:
B: The System.Collections.HashTable class should not be used as this class provides no type safety.
C, D: Although this is very similar to the SortedList class the SortedList class should be used instead in the scenario.

· Generic.SortedList !!!

QUESTION 20
You are currently in the process of reviewing an application that was created by a fellow developer.
The application that you are reviewing includes a declaration for a collection named EmployeeList, which stores Employee objects.
The declaration is shown below:

```
public class EmployeeList : Enumerator, IEnumerable
{
// Class implementation
}
```

You require the ability to iterate through the EmployeeList with minimum development effort.
What should you do?

A. Utilize the switch statement
B. Utilize the dowhile statement
C. Utilize the foreach statement
D. Utilize the if statement

Answer: C
Section: (none)

Explanation/Reference:
Explanation: the IEnumerable and IEnumerator interfaces of the System.Collections namespace are used to ensure that your collection class supports foreach iteration. The IEnumerable interface defines only one method named GetEnumerator that returns an object of type IEnumerator of the System.Collections namespace and is used to support iteration over a collection. The IEnumerator interface supports methods, such as Current, MoveNext, and Reset to iterate through a collection. The Current method returns the current element of the collection. The Move method positions the enumerator to the next available element of the collection. The Reset

method positions the enumerator before the first element of the collection.

Incorrect Answers:
A D: These statements will not allow you to iterate through the EmployeeList collection.
B: You should not use this statement because it will require manually calling the MoveNext and Current methods. The scenario states that you need to "...iterate through the EmployeeList with minimum development effort."

QUESTION 21
Certkiller.com has been contracted to develop an application for the local bank.
You have been given the responsibility of creating this application and need to store each transaction record, which is identified using a complex transaction identifier, in memory. The bank informs you that the total amount of transaction records could reach 200 per day.
To achieve this, you decide to utilize one of the existing collection classes in the .NET 2.0 class library.

You need to ensure that you the collection class you select is the most efficient one for storing transaction records.
What should you do?

A. Select the ListDictionary collection class.
B. Select the HashTable collection class.
C. Select the Queue collection class.
D. Select the StringCollection collection class.

Answer: B
Section: (none)

Explanation/Reference:
Explanation: You should select the HashTable class to store transaction records because each element is identified using a unique identifier and the size of the collection is large.
Elements in the HashTable collection are stored with a key/value pair where each key is created using a hash code.
The default capacity of a HashTable class is zero, and you can use the Add method to add a new element to the collection.
The Count property provides the total number of elements in the HashTable collection. An element of the HashTable class can be accessed using the DictionaryEntry class. You can use the Key and Value properties of the DictionaryEntry class to access the key associated with the element and the value of
the element, respectively.

Incorrect Answers:
A: You should not select this collection class because this class is used if the total number of elements to be stored in a collection
is less than 10 elements in length.
C: You should not select this collection class because you need to access transaction records using a transaction identifier,
not in sequential order.
D: You should not select this collection class because this class is used to manage a collection of string values.

· HashTable ist am effektivsten !!!

QUESTION 22
Certkiller .com has been hired by a small local private school to develop a class library that will be used in an application named ManageAttendance for the purpose of managing student records.
You are responsible for developing this class library. Certkiller .com has instructed you to create a collection in the application to store learners' results.

The school has informed you that they currently only have seven learners, but that this value will triple in the following year.
Due to the limited resources, you need to ensure that the collection you create consumes a minimum amount of resources.
What should you use to create the collection?

A. The HybridDictionary collection class.
B. The HashTable collection class.
C. The ListDictionary collection class.
D. The StringCollection collection class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: You should use the HybridDictionary class to create the collection because this class is useful in scenarios where the number of elements is unknown or could grow in size. A collection of the HybridDictionary type manages the collection depending on the number of elements. The HybridDictionary type collection uses the ListDictionary class to manage the collection when there are only a few elements. When the number of elements exceeds ten, the HybridDictionary type collection automatically converts the elements into HashTable management.

Incorrect Answers:
B: You should not use this collection class because this class is used if the total number of elements to be stored in a collection is known and is greater than ten elements in length.
C: You should not use this collection class because this class is used if the total number of elements to be stored in a collection is known and is less than ten elements in length.
D: You should not use this collection class because this class is used to manage a collection of string values.

· Wie die Frage wenig aber später vielleicht mehr - Hybrid.

QUESTION 23
You work as an application developer at Certkiller .com. Certkiller .com wants you to develop an application that stores and
retrieves client information by means of a unique account number. You create a custom collection class, which implements the IDictionary interface, named ClientDictionary.
The following code have been included into the new application.
//Create Client objects
Client c1 = new Client ("AReid", "Andy Reid", Status.Current); Client c2 = new Client ("DAustin", "Dean Austin", Status.New); //Create ClientDictionary object
IDictionary cData = new ClientDictionary ();
cData.Add ("10001", c1);
cData.Add ("10002", c2);
You use the same method to add other Client objects to the collection. You need to ensure that you are able to retrieve client information associated with the account number 10111.
What should you do?

A. Use the following code:
```
Client foundClient;
foundClient = (Client) cData.Find ("10111");
```
B. Use the following code:
```
Client foundClient;
if (cData.Contains ("10111"))
foundClient = cData ["10111"];
```

C. Use the following code:
```
Client foundClient;
if (cData.Contains ("10111"))
foundClient = (Client) cData ["10111"];
```
D. Use the following code:
```
Client foundClient;
foreach (string key in cData.Keys{
if (key == "10111")
foundClient = (Client) cData.Values ["10111"];
}
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This code invokes the Contains method of the IDictionary interface to determine whether a value is associated with the key 10111. If a value exists for that key, then the clientData ["10111"] statement retrieves the client data as a generic object. The code casts the generic object into a Client object, and it is stored in the foundClient variable

Incorrect Answers:
A: You should not use the code that uses the Find method because no such method exists in the IDictionary interface.
B: You should not use the code that assigns the foundClient variable to a generic object because the foundClient variable is declared as a Client type.
D: You should not use the code that iterates through the Keys collection because it is unnecessary and process-intensive.

· generic object MEINT hier den Datentyp object !!! - daher ist Casting notwendig !!!

· IDictionary:
· Object this [Object key] { get; set; }

QUESTION 24
Certkiller.com has instructed you to create a class named MetricFormula.
This class will be used to compare MetricUnit and EnglishUnit objects. The MetricFormula is currently defined as follows (Line numbers are used for reference purposes only):
```
1. public class MetricFormula
2. {
3.
4. }
```
You need to ensure that the MetricFormula class can be used to compare the required objects.
What should you do? (Choose two)

A. Add the following code on line 1:
```
: IComparable
{
```
B. Add the following code on line 1:
```
: IComparer
{
```
C. Add the following code on line 3:
```
public int Compare (object x, object y){
// implementation code
}
```

D. Add the following code on line 3:
public int CompareTo (object obj){
// implementation code
}

Answer: BC
Section: (none)

Explanation/Reference:
Explanation: You should add the code so that it reads as follows:
1. public class MetricFormula : IComparer
2. {
3. public int Compare (object x, object y)
4. {
5. // implementation code
5. }
6. }
You have to implement the IComparer interface to create a comparer class for MetricUnit and EnglishUnit objects.
The IComparer interface provides only one method named Compare. The Compare method takes two objects and returns an integer value representing whether those objects are equal, greater than, or less than the other.
If the return value is negative, then the first object is less than the second.
The objects are equal if the return value is zero.
The first object is greater than the first if the return value is positive. The IComparer interface is typically used if you want to implement comparison across objects of different classes without having to provide implementation in each comparable class.

Incorrect Answers:
A, D: You should use these two options because this should be implemented by the MetricUnit and EnglishUnit classes.

· FALLE: betroffen sind die Klassen MetricUnit und EnglishUnit MetricFormula ist die Vergleicherklasse !!!

QUESTION 25
You are developing an application that makes use of a Queue class object named MyQueue.
This Queue class object will be used to store messages sent by the user during application run time.
The application that you are developing provides an interface for administrators and an interface for users to create message reports.
You want to ensure that all user messages stored in the MyQueue object are removed when an administrator selects the reset option.
What should you do?

A. Use the Enqueue method of the MyQueue object.
B. Use the Clear method of the MyQueue object.
C. Use the Dequeue method of the MyQueue object.
D. Use the TrimToSize method of the MyQueue object.

Answer: B
Section: (none)

Explanation/Reference:
Explanation: The clear method sets the Count property of the Queue class object to 0 after removing all the elements from the queue. When you call the Clear method for a Queue object, the capacity of the Queue object is not changed.

Incorrect Answers:

A: You should not use this method because it is used to add a new element at the beginning of a Queue object.
C: You should not use this method because it is used to remove an element at the beginning of a Queue object.
D: You should not use this method because it is used to resize a Queue object.

QUESTION 26
You are developing an application that will store user messages collectively and the process the messages in sequence.
The order in which the messages are processed will depend on the order in which it is received.
To add messages to the collection, users will specify the message that should be stored in a TextBox control named txtMsg
and then click a Button control named btnAdd.
You need to ensure that the appropriate code is used to create the collection.
What should you use? (Choose two)

A. Queue msgCollection = new Queue ();
B. Stack msgCollection = new Stack ();
C. msgCollection.Enqueue (txtMSG.Text);
D. msgCollection.Push (txtMSG.Text);

Answer: AC
Section: (none)

Explanation/Reference:
Explanation: In this scenario, you should use the Queue class to create the collection because you are required to process user messages in sequence. The Dim statement creates an object named msgCollection of the Queue class. The second line of code then calls the Enqueue method of the msgCollection object to add the Text property value of the txtMSG control as an element in the collection. To manage elements in the queue, the Queue class provides methods, such as Dequeue and Clear. The Dequeue method is used to remove elements that are at the beginning of the Queue object. The
Clear method is used to remove all elements from a Queue object. The Queue class is a data structure for handling elements based on the First In First Out (FIFO) concept.

Incorrect Answers:
B, D: Using these lines of code is incorrect because they use the Stack class to create a collection. Stack objects are used to store elements on the Last In First Out (LIFO) concept.

· in sequence

QUESTION 27
You are developing an application that makes use of a Queue class object named MyQueue.
This Queue class object will be used to store messages sent by the user during application run time.
You would like to access the message at the beginning of the queue, prior to processing the user messages, without removing it.
What should you do?

A. Use the Enqueue method of the MyQueue object.
B. Use the Contains method of the MyQueue object.
C. Use the Dequeue method of the MyQueue object.
D. Use the Peek method of the MyQueue object.

Answer: D
Section: (none)

Explanation/Reference:

Explanation: The Peek method accesses the element at the beginning of the object of the Queue class without removing it from the queue. The Queue class is a data structure for handling elements based on the First In First Out (FIFO) concept. According to this concept, elements that are stored first are processed first.

Incorrect Answers:
A: You should not use this method of the Queue class because it is used to add a new element at the end of a Queue object.
B: You should not use this method of the Queue class because it is used to verify whether the specified element exists for the Queue object instance or not.
C: You should not use this method of the Queue
class because it is used to remove the next element at the beginning of a Queue object.

· Peek - Spitze (ohne Änderung)

QUESTION 28
Certkiller .com wants you to develop an application that stores and retrieves employee information by means of a unique staff number.

You create a custom collection class, which implements the type-safe IDictionary interface.
This collection class is named EmployeeCollection, and is defined using the following code.
public class EmployeeCollection : IDictionary <int, Employee> {
// Implementation code
}

A. Use the following code:
```
Employee e1, e2;
e1 = new Employee (1001, "Andy Reid", "Manager");
e2 = new Employee (1002, "Kara Lang", "Sales Engineer");
EmployeeCollection eData = new EmployeeCollection();
eData.Add (new KeyValuePair <string, Employee> (e1.ID, e1));
eData.Add (new KeyValuePair <string, Employee> (e2.ID, e2));
```
B. Use the following code:
```
Employee e1, e2;
e1 = new Employee (1001, "Andy Reid", "Manager");
e2 = new Employee (1002, "Kara Lang", "Sales Engineer");
EmployeeCollection eData = new EmployeeCollection();
eData.Add ((string) e1.ID, e1);
eData.Add ((string) e2.ID, e2);
```
C. Use the following code:
```
Employee e1, e2;
e1 = new Employee (1001, "Andy Reid", "Manager");
e2 = new Employee (1002, "Kara Lang", "Sales Engineer");
EmployeeCollection eData = new EmployeeCollection();
eData.Add (e1.ID, e1);
eData.Add (e2.ID, e2);
```
D. Use the following code:
```
Employee e1, e2;
e1 = new Employee (1001, "Andy Reid", "Manager");
e2 = new Employee (1002, "Kara Lang", "Sales Engineer");
EmployeeCollection eData = new EmployeeCollection();
eData.Add (new KeyValuePair (e1.ID, e1));
eData.Add (new KeyValuePair (e2.ID, e2));
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This code instantiates two Employee objects and an EmployeeCollectionobject, and it adds those two Employee objects to the EmployeeCollection object. The EmployeeCollection class implements the generic IDictionary interface specifying the ckey and TValue placeholders as Integer and Employee data types, respectively. Like the non-generic IDictionary interface, the key is used to retrieve the value. Unlike the non-generic IDictionary interface, the key does not have to be a string and the value does not have to be a generic object. Unlike the non-generic IDictionary interface, the Add method of the generic IDictionary interface can accept either a KeyValuePair structure with the appropriate data types specified or in this case two arguments, an integer and Employee object.

Incorrect Answers:
A: If you use this code fragment, the EmployeeCollection class accepts an integer foe the CKey placeholder and an Employee object for the TValue placeholder.

B: You should not use the code that casts the ID property from an integer into a string, because the key value should match the integer data type defined by CKey placeholder of the generic IDictionary interface.
D: You should not use the code that does not specify the CKey and TValue placeholders when using the KeyValuePair structure because the data types must be declared explicitly.

· <int, Employee> !!!

· Achtung D definiert KeyValuePair nicht generisch.
· A und B sind leicht als Blödsinn zu erkennen.

QUESTION 29
You work as an application developer at Certkiller .com. Certkiller .com wants you to develop an application that stores and retrieves staff information by means of a unique staff number. You have already written the following code for the purpose of storing Employee objects.

```
Employee e1 = new Employee (1001, "Andy Reid", "Manager");
Employee e2 = new Employee (1002, "Kara Lang", "Sales Engineer");
Dictionary <int, Employee> eData = new Dictionary <int, Employee> ();
eData.Add (e1.ID, e1);
eData.Add (e2.ID, e2);
```

All other Employee objects have been added in the same way. You are required to display all key/value pairs within the Dictionary collection.
What should you do?

A. Use the following code:
```
foreach (KeyValuePair<int, Employee> keyPair in eData)
Console.WriteLine ("{0} key : {1} value", keyPair.Key, keyPair.Value);
```
B. Use the following code:
```
foreach (string key in eData.Keys)
Console.WriteLine ("{0} key : {1} value", Key, (Employee) eData [key]);
```
C. Use the following code:
```
foreach (KeyValuePair keyPair in eData)
Console.WriteLine ("{0} key : {1} value", keyPair.Key, keyPair.Value);
```
D. Use the following code:
```
foreach (object value in eData.Values)
Console.WriteLine ("{0} key : {1} value", eData [value], value);
```

Answer: A
Section: (none)

Explanation/Reference:

Explanation: This code iterates through each KeyValuePair structure in the generic DictionaryData, and it displays the Key and Value properties. Like the non-generic IDictionary interface, the key is used to retrieve the value. Unlike the non-generic IDictionary interface, the key does not have to be a string and the value does not have to be a generic object. You must specify the CKey and TValue placeholders when specifying a KeyValuePair structure. Because the eDataDictionary collection is instantiated with the integer and Employee data types for the CKey and TValue placeholders, respectively, the KeyValuePair structure should also use these data types. During each iteration, the KeyValuePair object is assigned to the keyPair variable, and the Console.WriteLine method is used to display the Keyand Value properties to the console.

Incorrect Answers:
B: Like the non-generic IDictionary interface, the key is used to retrieve the value. Unlike the non-generic IDictionary interface, the key does not have to be a string and the value does not have to be a generic object. You must specify the CKey and TValue placeholders when specifying a KeyValuePair structure.
C: You should not use the code that does not specify the CKey and TValue placeholders when using the KeyValuePair structure because the data types must be declared explicitly.
D: You should not use the code that specifies a value when accessing items in the Dictionary collection because you should use a key to access a value and you cannot guarantee that only one key exists for a value, as there might be duplicate values in a Dictionary collection

QUESTION 30
You work as an application developer at Certkiller .com. Certkiller .com wants you to develop an application that handles passes for Certkiller .com's parking lot. The application has to store and retrieve vehicle information using a vehicle identification number (VIN).
You need to use the correct code to ensure type-safety.
What should you do?

A. Use the following code:
```
Vehicle v1, v2;
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
v2 = new Vehicle ("1F2569122491234574", "Mitsubishi Lancer", 2005);
ArrayList vList = new ArrayList ();
vList.Add (v1);
vList.Add (v2);
```
B. Use the following code:
```
Vehicle v1, v2;
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
v2 = new Vehicle ("1F2569122491234574", "Mitsubishi Lancer", 2005);
SortedList <string, Vehicle> vList = new SortedList <string, Vehicle> ();
vList.Add (v1.VIN, v1);
vList.Add (v2.VIN, v2);
```
C. Use the following code:
```
Vehicle v1, v2;
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
v2 = new Vehicle ("1F2569122491234574", "Mitsubishi Lancer", 2005);
List vList = new List ();
vList.Add (v1);
vList.Add (v2);
```
D. Use the following code:
```
Vehicle v1, v2;
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
v2 = new Vehicle ("1F2569122491234574", "Mitsubishi Lancer", 2005);
SortedList vList = new SortedList ();
vList.Add (v1.VIN, v1);
vList.Add (v2.VIN, v2);
```

Answer: B

Section: (none)

Explanation/Reference:
Explanation: This code instantiates two Vehicle objects and a SortedList collection, and it adds those two Vehicle objects to the SortedList collection. The SortedList collection class implements the generic IDictionary interface specifying the CKey and TValue placeholders. Like the non-generic IDictionary interface, the key is used to retrieve the value. Unlike the non-generic IDictionary interface, the key does not have to be a string and the value does not have to be a generic object. This allows flexibility and type-safety.

Incorrect Answers:
A: You should not use the code fragments that specify the ArrayList or generic List collections because these collection classes do not implement the IDictionary interface and only allow element access by index, not by key.
C, D: You should not use the code fragments that specify the List or non-generic SortedList collections because you must use generic collection classes to guarantee type-safety.

· Typsicher - Generic !!!

QUESTION 31
Certkiller.com wants you to develop an application that handles passes for Certkiller .com's parking lot. The application has to store and retrieve vehicle information in a contiguous list that allows for advanced navigation techniques.
You have already written and executed the following code:
Vehicle v1, v2, v3, v4, v5;
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
v2 = new Vehicle ("1H2569122493456960", "Honda Civic", 1999);
v3 = new Vehicle ("1F2569106891234589", "Mitsubishi Lancer", 2001);
v4 = new Vehicle ("1F7969122491234589", "Mazda MX7", 1998);
v5 = new Vehicle ("1T2569122493456123", "Toyota Supra", 2000);

A = Nissan, Honda, Mitsubishi, Mazda, Toyota
B = Nissan, Mazda, Mitsubishi, Honda, Toyota
C = Nissan, Mazda, Mitsubishi, Toyota, Honda
D = Nissan, Mitsubishi, Mazda, Honda, Toyota

What is the right output?

A. Nissan Silvia 1996 (1M2567871Y91234574)
Honda Civic 1999 (1H2569122493456960)
Mitsubishi Lancer 2001 (1F2569106891234589)
Mazda MX7 1998 (1F7969122491234589)
Toyota Supra 2000 (1T2569122493456123)

B. Nissan Silvia 1996 (1M2567871Y91234574)
Mazda MX7 1998 (1F7969122491234589)
Mitsubishi Lancer 2001 (1F2569106891234589)
Honda Civic 1999 (1H2569122493456960)
Toyota Supra 2000 (1T2569122493456123)

C. Nissan Silvia 1996 (1M2567871Y91234574)
Mazda MX7 1998 (1F7969122491234589)
Mitsubishi Lancer 2001 (1F2569106891234589)
Toyota Corolla 2002 (1T2569122493456123)
Honda Civic 1999 (1H2569122493456960)

D. Nissan Silvia 1996 (1M2567871Y91234574)
Mitsubishi Lancer 2001 (1F2569106891234589)
Mazda MX7 1998 (1F7969122491234589)
Honda Civic 1999 (1H2569122493456960)
Toyota Supra 2000 (1T2569122493456123)

Answer: B
Section: (none)

Explanation/Reference:
Explanation: The LinkedList collection class is a doubly-linked list that allows advanced navigation techniques when accessing its elements.
An element pointer is provided by the LinkedListNode class with the Previous and Next properties.
The LinkedList collection class has a few methods of insertion, including AddFirst, AddLast, AddBefore, and AddAfter methods.
The AddFirst and AddLast methods accept an element argument and return a LinkedListNode object as a pointer reference.
The AddBefore and AddAfter methods also return a LinkedListNode object, but they accept another LinkedListNode
indicating which node before or after to insert the element. In this scenario, there are five Vehicle objects added to the LinkedList collection named vList. The v1 object is added to the beginning of vList collection by invoking the AddFirst method. The v2 object is added to the end of the vList collection by invoking the AddLast method. The v3 object is added by invoking the AddAfter method. The v4 object is added before the v3 object by invoking the AddBefore method. Finally, the v5 object is added at the end of the vList collection by invoking the AddLast method.

Incorrect Answers:
A, C, D: These options do not represent the output that will be produced by the code you wrote.

· Richtig wäre hier Antwort A !!!

· Wenn man den Code an die Lösung anpasst
· vNode = vList.AddBefore (vNode, v4);
· gibt es keine richtige Lösung !!!

QUESTION 32
You work as an application developer at Certkiller .com. You are developing a collection class named ClientCollection,
which is to be used for storing the names of Certkiller.com's clients that are situated in various geographical areas.

These client names are represented by the Client class. You are planning to create a method named SortClients in the ClientCollection class to arrange Client objects in ascending order.
You need to ensure that the appropriate interface is implemented by the Client class to allow sorting.
What interface should be used?

A. IDictionary
B. IComparable
C. IComparer
D. IEqualityComparer

Answer: B
Section: (none)

Explanation/Reference:
Explanation: The IComparable interface provides only one method named CompareTo, which takes on generic

object, compares it to the current instance, and returns an Integer value representing whether the current instance is equal to, greater than, or less than the object. The IComparable interface is typically used when you want to create a class whose objects can be sorted in either a list or collection.

Incorrect Answers:
A: This interface should not be implemented because it is used to create a collection that is managed by key/ value pairs.
C: This interface should not be implemented because it should be implemented by collection or comparer classes, not comparable classes.
D: This interface should not be implemented because it provides methods to compare two objects for equality only.

· Nicht mit IComparer verwechseln - hier wird nach einem Interface für die Klasse Client gefragt !!!

QUESTION 33
You have been given the responsibility of creating a class named CalcSalary that will determine the salaries of Certkiller .com's staff.
The CalcSalary class includes methods to increment and decrement staff salaries.
You would like to invoke the IncrementSalary and DecrementSalary methods dynamically at runtime from the sales manager application when needed.
After viewing the information displayed in the exhibit, you decide to use the Salary delegate to invoke these methods.
using System;
public delegate bool Salary (Employee Emp, double Amount); public class CalcSalary {
// for promotions

A. public void Review (Employee emp, double amount){
 Salary salaryDel;
 if (emp.Status == QuarterlyReview.OnTarget || emp.Status == QuarterlyReview.AboveGoals)
 salaryDel.Invoke (CalcSalary.IncrementSalary (emp, amount)); else
 salaryDel.Invoke (CalcSalary.DecrementSalary (emp, amount)); }
B. public void Review (Employee emp, double amount){
 Salary salaryDel;
 if (emp.Status == QuarterlyReview.OnTarget || emp.Status == QuarterlyReview.AboveGoals)
 salaryDel.Method = CalcSalary.IncrementSalary;
 else
 salaryDel.Method = CalcSalary.DecrementSalary;
 salaryDel.Invoke (emp, amount);
 }
C. public void Review (Employee emp, double amount){
 Salary salaryDel;
 if (emp.Status == QuarterlyReview.OnTarget || emp.Status == QuarterlyReview.AboveGoals)
 salaryDel.IncrementSalary (emp, amount);
 else
 salaryDel.DecrementSalary (emp, amount);
 }
D. public void Review (Employee emp, double amount){
 Salary salaryDel;
 if (emp.Status == QuarterlyReview.OnTarget || emp.Status == QuarterlyReview.AboveGoals)
 salaryDel = CalcSalary.IncrementSalary;
 else
 salaryDel = CalcSalary.DecrementSalary;
 salaryDel.Invoke (emp, amount);
 }

Answer: D

Section: (none)

Explanation/Reference:
Explanation: This code declares a delegate variable and, based upon the value of the Status property, assigns the delegate variable to the correct method. If the Status property is QuarterlyReview.OnTarget or QuarterlyReview.AboveGoals, then the Salary delegate variable is assigned to the IncrementSalary method of the CalcSalary class. If not, then the Salary delegate variable is assigned to the DecrementSalary method of the CalcSalary class. Delegates are method pointers and must be assigned to a method so that a delegate variable can invoke it. The Invoke method takes those arguments specified by the delegate declaration.

Incorrect Answers:
A, B, C: You should not use these code fragments because they are syntactically incorrect and will result in a compilation error if used.

· Wie wird ein Delegat belegt !?!

QUESTION 34
You have been given the responsibility of creating a class named CalcSalary that will determine the salaries of Certkiller .com's staff.
The CalcSalary class includes methods to increment and decrement staff salaries. The following code is included in the CalcSalary class:

```
public class CalcSalary {
// for promotions
public static bool IncrementSalary (Employee Emp, double Amount){
if (Emp.Status == QuarterlyReview.AboveGoals)
Emp.Salary += Amount;
return true;
```

A. public delegate bool Salary (Employee Emp, double Amount);
B. public bool Salary (Employee Emp, double Amount);
C. public event bool Salary (Employee Emp, double Amount);
D. public delegate void Salary (Employee Emp, double Amount);

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The signatures of the delegate and the attached method(s) should be identical. When you declare a delegate, you use the delegate keyword followed by the return type. If you bind the delegate to a method with a return type, you should specify that. If you bind the delegate to a method that does not return a data type, you should use the void keyword. After that, you should specify the name of the delegate and declare the arguments expected. In this scenario, the IncrementSalary and DecrementSalary methods accept an Employee object and a double value, and return a Boolean value. You should, therefore, accept an Employee object and a double value, and return a Boolean value when you declare the SalaryDelegate delegate.

Incorrect Answers:
B: You should not us the code that does not use the delegate keyword.
C: You should not us the code that declares an event named SalaryDelegate.
D: You should not us the code that uses the void keyword because both the IncrementSalary and DecrementSalary methods return a Boolean value.

· Wie wird ein Delegate für die geforderte Signatur deklariert !!!

QUESTION 35
You use Reflection to obtain information about a method named MyMethod.

You need to ascertain whether MyMethod is accessible to a derived class.
What should you do?

A. Call the IsAssembly property of the MethodInfo class.
B. Call the IsVirtual property of the MethodInfo class.
C. Call the IsStatic property of the MethodInfo class.
D. Call the IsFamily property of the MethodInfo class.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The IsFamily property determines whether the method is accessible to the class and descendant classes.

IsAssembly determines accessibility from within the assembly.

IsVirtual indicates whether the method is virtual.

IsStatic indicates whether the method is static.

· descendant = abgeleitet

QUESTION 36
You are creating a class that uses unmanaged resources.
This class maintains references to managed resources on other objects.
You need to ensure that users of this class can explicitly release resources when the class instance ceases to be needed.
Which three actions should you perform?
(Each correct answer presents part of the solution. Choose three.)

A. Define the class such that it inherits from the WeakReference class.
B. Define the class such that it implements the IDisposable interface.
C. Create a class destructor that calls methods on other objects to release the managed resources.
D. Create a class destructor that releases the unmanaged resources.
E. Create a Dispose method that calls System.GC.Collect to force garbage collection.
F. Create a Dispose method that releases unmanaged resources and calls methods on other objects to release the managed resources.

Answer: BDF
Section: (none)

Explanation/Reference:
Explanation:
It is necessary to implement the IDisposable interface if you need to release unmanaged resources or want explicit control of the life of managed resources. A class destructor should be created to release the unmanaged resources and this should be called from within the Dispose method. The dispose method should also release the managed resources.

Inheriting from WeakReference would result in the garbage collector releasing resources even though there may be valid references.

The managed resources should be released in the Dispose method.

System.GC.Collect could be used, however it is more efficient to manually release the managed resources. The GC incurs overhead and may have only recently been called anyway. The question states resources should be released explicitly.

· D statt C - da im Destruktor die Dispose-Methode aufgerufen wird, und dadurch indirekt die unmanaged resources freigegeben werden.

QUESTION 37
You need to select a class that is optimized for key-based item retrieval from both small and large collections. Which class should you choose?

A. OrderedDictionary class
B. HybridDictionary class
C. ListDictionary class
D. Hashtable class

Answer: B
Section: (none)

Explanation/Reference:
Explanation: A HybridDictionary is implemented as a ListDictionary for small collections and a Hashtable for large collections. Hence it provides very efficient storage for both small and large collections.

OrderedDictionary supports sorting based on the key. It has similar disadvantages for small collections to Hashtable on which it is based.

ListDictionary is ideal for small collections because it is implemented as a light-weight linked list. Performance will suffer for large collections.

HashTable is ideal for large collections, for small collections the overheads of such a sophisticated data structure do not compensate for the benefits.

QUESTION 38
You need to identify a type that meets the following criteria:
Is always a number.
Is not greater than 65,535. Which type should you choose?

A. System.UInt16
B. int
C. System.String
D. System.IntPtr

Answer: A
Section: (none)

Explanation/Reference:
Explanation: System.UInt16 is the most efficient type for storing positive whole numbers up to 65,536.
An int type could be used but it is a lot wider than necessary. System.String is intended for storing immutable strings. System.IntPtr is a pointer to a memory address and it's size is determined by the runtime platform. It is primarily used for interoperation.

· Achtung: in der Angabe steht nichts über ein Vorzeichen !!!

QUESTION 39
You are developing a custom-collection class.
You need to create a method in your class.
You need to ensure that the method you create in your class returns a type that is compatible with the Foreach statement.
Which criterion should the method meet?

A. The method must return a type of either IEnumerator or IEnumerable.
B. The method must return a type of IComparable.
C. The method must explicitly contain a collection.
D. The method must be the only iterator in the class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: Returning an IEnumerator will enable the ForEach statement. IEnumerable is a subtype of IEnumerator hence can also be up cast to IEnumerator.

IComparable is used to enable comparisons for a user type.

Explicitly containing a collection within the method will have no impact on the methods return type which is what the ForEach statement will operate on.

QUESTION 40
You are developing a custom event handler to automatically print all open documents.
The event handler helps specify the number of copies to be printed.
You need to develop a custom event arguments class to pass as a parameter to the event handler.
Which code segment should you use?

A.
```
public class PrintingArgs {
private int copies;
public PrintingArgs(int numberOfCopies) {
this.copies = numberOfCopies;
}
public int Copies {
get {return this.copies;}
}
}
```
B.
```
public class PrintingArgs : EventArgs {
private int copies;
public PrintingArgs(int numberOfCopies) {
this.copies = numberOfCopies;
}
public int Copies {
get {return this.copies;}
}
}
```

C. public class PrintingArgs {
private EventArgs eventArgs;
public PrintingArgs(EventArgs ea) {
this.eventArgs = ea;
}
public EventArgs Args {
get {return eventArgs;}
}
}

D. public class PrintingArgs : EventArgs {
private int copies;
}

Answer: B
Section: (none)

Explanation/Reference:
Explanation: The event handler will require a parameter of type EventArgs or a derived type. The derived type in this example will question states that the event handler helps specify the number of documents that require printing,
this information will have to come from the derived EventArgs class in the form of an instance variable.

A & C do not derive from EventArgs hence cannot fit into the event handling model.
D does not expose the copies instance variable.

QUESTION 41
You write the following code.
public delegate void FaxDocs(object sender, FaxArgs args);
You need to create an event that will invoke FaxDocs.
Which code segment should you use?

A. public static event FaxDocs Fax;

B. public static event Fax FaxDocs;

C. public class FaxArgs : EventArgs {
private string coverPageInfo;
public FaxArgs(string coverInfo) {
this.coverPageInfo = coverPageInfo;
}
public string CoverPageInformation {
get {return this.coverPageInfo;}
}
}

D. public class FaxArgs : EventArgs {
private sting coverPageinfo;
public string CoverPageInformation {
get {return this.coverPageInfo;}
}
}

Answer: A
Section: (none)

Explanation/Reference:
Explanation: An event is declared by using the event keyword followed by a delegate type and then a name for the event.

B fax is not a delegate type.
C&D do not declare events.

· Antwort A (richtig) static irritiert !!!
· C und D erzeugen nur die FaxArgs-Klasse - was nicht gefragt ist !!!

QUESTION 42
You need to create a method to clear a Queue named q.
Which code segment should you use?

A. foreach (object e in q) {
B. Dequeue();
}
foreach (object e in q) {
Enqueue(null);
}
C. q.Clear();
D. q.Dequeue();

Answer: C
Section: (none)

Explanation/Reference:
Explanation: Simply call the Clear() method to empty a queue.

A Dequeuing all of the items in a queue will also serve the same affect but it is a lot more roundabout.

B attempts to re-queue items that are already in the queue

D will de-queue only one item that is at the front of the queue.

QUESTION 43
You are developing an application to assist the user in conducting electronic surveys.
The survey consists of 25 true-or-false questions.
You need to perform the following tasks:
Initialize each answer to true. Minimize the amount of memory used by each survey.
Which storage option should you choose?

A. BitVector32 answer = new BitVector32(1);
B. BitVector32 answer = new BitVector32(-1);
C. BitArray answer = new BitArray (1);
D. BitArray answer = new BitArray (-1);

Answer: B
Section: (none)

Explanation/Reference:
Explanation: C & D BitVector32 is more efficient than a BitArray when 32 or less binary flags are required.
Primarily because it is a value type.
Note: we are not sure why B is preferred to A.

· new BitVector32(-1) intialisiert alle Bits mit true !!!

QUESTION 44
You are creating an application that lists processes on remote computers.
The application requires a method that performs the following tasks: Accept the remote computer name as a string parameter named strComputer.
Return an ArrayList object that contains the names of all processes that are running on that computer.
You need to write a code segment that retrieves the name of each process that is running on the remote computer and adds the name to the ArrayList object.
Which code segment should you use?

A.
```
ArrayList^ al = gcnew ArrayList();
array<process^> procs = Process::GetProcessesByName(strComputer);
for each (Process^ proc in procs) {
al->Add(proc);
}
```
B.
```
ArrayList^ al = gcnew ArrayList();
array<process^> procs = Process::GetProcesses(strComputer);
for each (Process^ proc in procs) {
al->Add(proc);
}
```
C.
```
ArrayList^ al = gcnew ArrayList();
array<Process^> procs = Process::GetProcessesByName(strComputer);
for each (Process^ proc in procs) {
al->Add(proc->ProcessName);
}
```
D.
```
ArrayList^ al = gcnew ArrayList();
array<Process^> procs = Process::GetProcesses(strComputer);
for each (Process^ proc in procs) {
al->Add(proc->ProcessName);
```

Answer: D
Section: (none)

Explanation/Reference:
Explanation: Call Processes.GetProcesses() supplying the name of the computer and then iterate through the returned collection of processes adding the process name to the arraylist.

A & C use GetProcessByName() and return processes on the current computer only. B adds the entire process to the arraylist rather than just the process name.

QUESTION 45
You need to write a multicast delegate that accepts a DateTime argument.
Which code segment should you use?

A. public delegate int PowerDeviceOn(bool result, DateTime autoPowerOff);
B. public delegate bool PowerDeviceOn(object sender, EventArgs autoPowerOff);
C. public delegate void powerDeviceOn(DateTime autoPowerOff);
D. public delegate bool powerDeviceOn(DateTime autoPowerOff);

Answer: C
Section: (none)

Explanation/Reference:
Explanation: A & B the delegates do not accept an argument of type DateTime D The question does not explicitly mention a return type. Also with multicasting only the return value of the last method called as part of a multicast chain is returned. Hence return values do not tend to be very useful as far as multicasting is

concerned.

· Rückgabewert void !!!

QUESTION 46
You need to write a multicast delegate that accepts a DateTime argument and returns a Boolean value.
Which code segment should you use?

A. public delegate int PowerDeviceOn(bool, DateTime);
B. public delegate bool PowerDeviceOn(Object, EventArgs);
C. public delegate void PowerDeviceOn(DateTime);
D. public delegate bool PowerDeviceOn(DateTime);

Answer: D
Section: (none)

Explanation/Reference:
Explanation: A & C does not return a type Bool

B does not accept a parameter of type DateTime

· Achtung auf Rückgabewert bool, warum auch immer dieser ben.tigt wird.

QUESTION 47
You are creating an undo buffer that stores data modifications.
You need to ensure that the undo functionality undoes the most recent data modifications first.
You also need to ensure that the undo buffer permits the storage of strings only.
Which code segment should you use?

A. Stack<string> undoBuffer = new Stack<string>();
B. Stack undoBuffer = new Stack();
C. Queue<string> undoBuffer = new Queue<string>();
D. Queue undoBuffer = new Queue();

Answer: A
Section: (none)

Explanation/Reference:
Explanation: A Stack caters for a last in first out scenario similar to what is required in an undo buffer. By using Generics you can force a strongly typed collection that takes strings only.
B is not strongly typed for strings, it will take any type of object. C & D Queue is a First in First out collection, it is not appropriate in this instance.

· Natürlich Stack (LIFO) und Generic (Typsicher)

QUESTION 48
You are writing a custom dictionary.
The custom-dictionary class is named MyDictionary.
You need to ensure that the dictionary is type safe.
Which code segment should you use?

A. class MyDictionary : Dictionary<string, string>

B. class MyDictionary : HashTable

C. class MyDictionary : IDictionary

D. class MyDictionary { ... }
Dictionary<string, string> t = new Dictionary<string, string>();
MyDictionary dictionary = (MyDictionary)t;

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 49
You are creating a class to compare a specially-formatted string.
The default collation comparisons do not apply.
You need to implement the IComparable<string> interface.
Which code segment should you use?

A. public class Person : IComparable<string>{
public int CompareTo(string other){
}
}

B. public class Person : IComparable<string>{
public int CompareTo(object other){
}
}

C. public class Person : IComparable<string>{
public bool CompareTo(string other){
}
}

D. public class Person : IComparable<string>{
public bool CompareTo(object other){
}
}

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 50
You are testing a newly developed method named PersistToDB. This method accepts a parameter of type EventLogEntry.
This method does not return a value. You need to create a code segment that helps you to test the method.
The code segment must read entries from the application log of local computers and then pass the entries on to the PersistToDB method.
The code block must pass only events of type Error or Warning from the source MySource to the PersistToDB method.
Which code segment should you use?

A.
```
EventLog myLog = new EventLog("Application",".");
foreach (EventLogEntry entry in myLog.Entries){
if (entry.Source == "MySource"){
  PersistToDB(entry);
}
}
```
B.
```
EventLog myLog = new EventLog("Application",".");
myLog.Source = "MySource";
foreach (EventLogEntry entry in myLog.Entries){
if (entry.EntryType == (EventLogEntryType.Error & EventLogEntryType.Warning)){
  PersistToDB(entry);
}
}
```
C.
```
EventLog myLog = new EventLog("Application",".");
foreach (EventLogEntry entry in myLog.Entries){
if (entry.Source == "MySource"){
   if (entry.EntryType == EventLogEntryType.Error || entry.EntryType == EventLogEntryType.Warning){
   PersistToDB(entry);
   }
}
}
```
D.
```
EventLog myLog = new EventLog("Application",".");
myLog.Source = "MySource";
foreach (EventLogEntry entry in myLog.Entries){
if (entry.EntryType == EventLogEntryType.Error ||  entry.EntryType == EventLogEntryType.Warning){
  PersistToDB(entry);
}
}
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: It is necessary to create a new Application EventLog, iterate over all the EventLogEntries and call the PersistToDB method
if the entry is a warning or error and the source is MySource.

A will PersistToDb irrespective of the type of log entry. The question explicitly states only warnings and errors should be persisted.

B features an incorrect test for warnings and errors.

D&B do not ensure that only MySource entries are persisted. Instead they overwrite the source.
· Achtung Source muss manuell abgefragt warden

QUESTION 51
What types of objects derive from te MemberInfo class? (Chose all that applay.)

A. FieldInfo class
B. MethodInfo class
C. Assembly class
D. Type class

Answer: ABD
Section: (none)

Explanation/Reference:

QUESTION 52

You are writing an application that communicates with a database. The connection string is stored in the application configuration file. Which of the following string?

A.
```
'VB
ConfigurationManager.ConnectionStrings.ConnectionString

// C#
ConfigurationManager.ConnectionStrings.ConnectionString
```

B.
```
'VB
ConfigurationSettings.ConnectionStrings.ConnectionString

// C#
ConfigurationSettings.ConnectionStrings.ConnectionString
```

C.
```
'VB
ConfigurationManager.ConnectionStrings(0).ConnectionString

// C#
ConfigurationManager.ConnectionStrings[0].ConnectionString
```

D.
```
'VB
ConfigurationSettings.ConnectionStrings(0).ConnectionString

// C#
ConfigurationSettings.ConnectionStrings[0].ConnectionString
```

Answer: C
Section: (none)

Explanation/Reference:

ConfigurationManager.ConnectionStrings is a collection of type ConnectionStringSettingsCollection that contains the connection strings loaded from the appli collection, you must access it using an index. ConfigurationSettings, which is obsolete, does not contain a ConnectionStrings property.

Exam Objective:
Embedding configuration, diagnostic, management, and installation features into a .NET Framework application

Exam SubObjective(s):
Embed configuration management functionality into a .NET Framework application. (Refer System.Configuration namespace) Configuration class and Configu

QUESTION 53

What values of the AssemblyBuilderAccess enumeration allow you to execute the assembly?

A. AssemblyBuilderAccess.Run

B. AssemblyBuilderAccess.ReflectionOnly

C. AssemblyBuilderAccess.RunAndSave

D. AssemblyBuilderAccess.Save

Answer: AC
Section: (none)

Explanation/Reference:

Exam B

QUESTION 1
You are testing a newly developed method named PersistToDB. This method accepts a parameter of type EventLogEntry.
This method does not return a value. You need to create a code segment that helps you to test the method.
The code segment must read entries from the application log of local computers and then pass the entries on to the PersistToDB method.
The code block must pass only events of type Error or Warning from the source MySource to the PersistToDB method.
Which code segment should you use?

A.
```
EventLog myLog = new EventLog("Application",".");
foreach (EventLogEntry entry in myLog.Entries){
if (entry.Source == "MySource"){
  PersistToDB(entry);
}
}
```
B.
```
EventLog myLog = new EventLog("Application",".");
myLog.Source = "MySource";
foreach (EventLogEntry entry in myLog.Entries){
if (entry.EntryType == (EventLogEntryType.Error & EventLogEntryType.Warning)){
  PersistToDB(entry);
}
}
```
C.
```
EventLog myLog = new EventLog("Application",".");
foreach (EventLogEntry entry in myLog.Entries){
if (entry.Source == "MySource"){
   if (entry.EntryType == EventLogEntryType.Error || entry.EntryType == EventLogEntryType.Warning){
   PersistToDB(entry);
   }
}
}
```
D.
```
EventLog myLog = new EventLog("Application",".");
myLog.Source = "MySource";
foreach (EventLogEntry entry in myLog.Entries){
if (entry.EntryType == EventLogEntryType.Error ||  entry.EntryType == EventLogEntryType.Warning){
  PersistToDB(entry);
}
}
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: It is necessary to create a new Application EventLog, iterate over all the EventLogEntries and call the PersistToDB method
if the entry is a warning or error and the source is MySource.

A will PersistToDb irrespective of the type of log entry. The question explicitly states only warnings and errors should be persisted.

B features an incorrect test for warnings and errors.

D&B do not ensure that only MySource entries are persisted. Instead they overwrite the source.
· Achtung Source muss manuell abgefragt warden

QUESTION 2
You need to write a code segment that performs the following tasks: ? Retrieves the name of each paused service. ?
Passes the name to the Add method of Collection1.
Which code segment should you use?

A. ManagementObjectSearcher searcher = new ManagementObjectSearcher("Select * from Win32_service where State = 'Paused'");
foreach (ManagementObject svc in searcher.Get()) {
Collection1.Add(svc["DisplayName"]);
}
B. ManagementObjectSearcher searcher = new ManagementObjectSearcher("Select * from Win32_service", "State = 'Paused'");
foreach (ManagementObject svc in searcher.Get()) {
Collection1.Add(svc["DisplayName"]);
}
C. ManagementObjectSearcher searcher = new ManagementObjectSearcher("Select * from Win32_service");
foreach (ManagementObject svc in searcher.Get()) {
if ((string) svc["State"] == "'Paused'") {
Collection1.Add(svc["DisplayName"]);
}
}
D. ManagementObjectSearcher searcher = new ManagementObjectSearcher();
searcher.Scope = new ManagementScope(Win32_service");
foreach (ManagementObject svc in searcher.Get()) {
if ((string)svc["State"] == "Paused") {
Collection1.Add(svc["DisplayName"]);
}
}

Answer: A
Section: (none)

Explanation/Reference:
Explanation: Use the ManagmentObjectSearcher to search for all services with a paused state.
Iterate over the returned collection and add the display name to Collection1.

B The constructor is invoked incorrectly.

C & D the query is incorrect. The searcher does not restrict to paused services.

· C würde gehen aber mit mehr Aufwand als A !!!

QUESTION 3
You are using the Microsoft Visual Studio 2005 IDE to examine the output of a method that returns a string. You assign the output of the method to a string variable named fName. You need to write a code segment that prints the following on a single line The message:
"Test Failed: "
The value of fName if the value of fName does not equal "Certkiller" You also need to ensure that the code segment simultaneously facilitates uninterrupted execution of the application.
Which code segment should you use?

A. Debug.Assert(fName == "CertKiller", "Test Failed: ", fName);
B. Debug.WriteLineIf(fName != "CertKiller", fName, "Test Failed: ");

C. if (fName != "Certkiller") {
Debug.print("Test Failed: ");
Debug.print(fName);
}
D. if (fName != "Certkiller") {
Debug.WriteLine("Test Failed: ");
Debug.WriteLine(fName);
}

Answer: B
Section: (none)

Explanation/Reference:
Explanation: Debug.WriteLineIf() will conditionally write the "Test Failed", it will not interrupt execution of the application.

A an Assert will stop execution of the application in debug mode if the condition is not met.

C & D could be used but they execute in the release configurations

· ACHTUNG: uninterrupted exepcution !!!

QUESTION 4
You are testing a method that examines a running process.
This method returns an ArrayList containing the name and full path of all modules that are loaded by the process.
You need to list the modules loaded by a process named C:\TestApps\Process1.exe.
Which code segment should you use?

A. ArrayList ar = new ArrayList();
Process[] procs;
ProcessModuleCollection module;
procs = Process.GetProcesses(@"Process1");
if (procs.Length > 0) {
module = procs[0].Modules;
foreach (ProcessModule mod in modules) {
ar.Add(mod.ModuleName);
}
}
B. ArrayList ar = new ArrayList();
Process[] procs;
ProcessModuleCollection module;
procs = Process.GetProcesses("C:\TestApps\Process1.exe");
if (procs.Length > 0) {
module = procs[0].Modules;
foreach (ProcessModule mod in modules) {
ar.Add(mod.ModuleName);
}
}

C. ArrayList ar = new ArrayList();
Process[] procs;
ProcessModuleCollection module;
procs = Process.GetProcessesByName(@"Process1");
if (procs.Length > 0) {
module = procs[0].Modules;
foreach (ProcessModule mod in modules) {
ar.Add(mod.FileName);
}
}

D. ArrayList ar = new ArrayList();
Process[] procs;
ProcessModuleCollection module;
procs = Process.GetProcessesByName(@"C:\TestApps\Process1.exe");
if (procs.Length > 0) {
module = procs[0].Modules;
foreach (ProcessModule mod in modules) {
ar.Add(mod.FileName);
}
}

Answer: C
Section: (none)

Explanation/Reference:
Explanation: Process.GetProcessesByName() should be used to return all the processes that match a process name.
The modules collection exposes all the modules loaded by the process and can be added to an ArrayList.

A & B GetProcesses() accepts a computer name for retrieving the processes on a remote computer. GetProcessesByName() should be used to return processes by their name. D the path of the process is not part of the process name.

·Process.GetProcessesByName("nurName");

QUESTION 5
You have been asked to profile a business application that can be accessible using the Event Log API.
You have started by adding the following code to create a custom event log:
if (EventLog.SourceExists ("Application1"))
EventLog.DeleteEventSource ("Application1");
//Create new event log
EventLog.CreateEventSource ("Application1", "Profile");

You need to write an event to the Application1 event log.
What code must you use?

A. EventLog log = new EventLog ();
log.Source = "Application1";
log.Log = "Profile";
log.WriteEvent("Writing to event log.");

B. EventLog log = new EventLog ();
log.Source = "Profile";
log.Log = "Application1";
log.WriteEvent("Writing to event log.");

C. EventLog log = new EventLog ();
log.Source = "Application1";
log.Log = "Profile";
log.WriteEntry("Writing to event log.");

D. EventLog log = new EventLog ();
log.Source = "Profile";
log.Log = "Application1";
log.WriteEntry("Writing to event log.");

Answer: C
Section: (none)

Explanation/Reference:
This code instantiates an EventLog object, sets the Source and Log properties, and invokes the WriteEntry method
to output the message to the event log.
The EventLog object allows you to create, delete, read from, or write to Windows event logs.
In this scenario, you use the CreateEventSource method to create a custom event log. When calling the CreateEventSource method, you pass the method two arguments. The first argument represents the source name for the event log, and the second represents the name of the event log.
Next, you want to write an entry to the Application1 event log. To write to an event log, you must first identify the event source and the name of the event log to which you want to write.
The Source property specifies the event source, and the Log property specifies the name of the event log.
There are two methods to writ to the EventLog object:
WriteEntry and WriteEvent.
The WriteEntry method is an overloaded method used to write a text message to an event log.

The WriteEvent method is used to write localized resources and event instances to an event log.

Incorrect Answers:
A, B: The WriteEvent method is used to write localized resources and event instances to an event log.
D: You should not use the code fragments that specify a value of "Profile" for the Source property and a value "Application1" for the Log property because they would attempt to write the entry to an event log named Application1.

· Source und Log - Eigenschaft richtig belegen und log.WriteEntry(string); · C. EventLog log = new EventLog ();
· log.Source = "Application1";
· log.Log = "Profile";
· log.WriteEntry("Writing to event log.");

· A ist falsch wegen
· log.WriteEvent - benötigt eine EventInstanz !!!

QUESTION 6
The Certkiller .com network contains an application server named Certkiller -SR07.
You have been asked to profile a business application that can be accessible using the Event Log API.
You want to achieve this by creating a custom event log on Certkiller -SR07.
What should you do?

A. Use the following code:
EventLog.CreateEventSource("Application1", "Profile", "Certkiller -SR07");
B. Use the following code:
EventLog.CreateEventSource("Application1", "Profile");

C. Use the following code:
EventSourceCreationData sourceData = new EventSourceCreationData("Application1", "Profile");
sourceData.MachineName = "Certkiller -SR07";
EventLog.CreateEventSource (sourceData);

D. Use the following code:
EventSourceCreationData sourceData = new EventSourceCreationData ("Application1", "Profile");
EventLog.CreateEventSource(sourceData);

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This code instantiates an EventSourceCreationData object, sets the MachineName property of the EventSourceCreationData object, and invokes the CreateEventSource method, passing the EventSourceCreationData object
as an argument, to create the custom event log.
The EventSourceCreationData object is used to configure a new event log source. You can then pass the EventSourceCreationData object to the CreateEventSource method of an EventLog
to register the event log source and corresponding event log so that you can write entries to it.
The EventSourceCreationData object's constructor accepts two String arguments: Source and Log.
The Source argument specifies the event source, and the Log argument specifies the name of the event log.
After creating an instance of EventSourceCreationData, you can set the EventSourceCreationData object's properties to further configure the event source.
The MachineName property represents the computer on which you want to create the event source.
In this scenario, you create a new EventSourceCreationData object named sourceData and then set its MachineName property to Certkiller -SR07. Then, you call the CreateEventSource method, passing the method sourceData. This creates an event log source on the computer named Certkiller -SR07.

Incorrect Answers:
A: The CreateEventSource method that takes three String arguments is obsolete in the .NET 2.0 Framework.
B, D: Both of these code fragments would create an event log on the local computer by default,
but the scenario states that you should explicitly specify the machine name because the computer on which the code is running is unknown.

· Tipp: wo wird der Server angegeben (A und C)
· CreateEventSource ist veraltet !!! - daher ist A falsch · EventSourceCreationData soll verwendet werden daher C richtig.

· public EventSourceCreationData (string source, string logName) · Standardmässig der lokale Computer.
· Änderung über die Eigenschaft MachineName möglich.

QUESTION 7
You are required to retrieve and display the names of all processes that are currently running in memory.
What should you do?

A. Use the following code:
foreach (Process curProcess in Process.GetSystemProcesses())
Console.WriteLine (curProcess.ProcessName);

B. Use the following code:
foreach (Process curProcess in Process.GetAllProcesses())
Console.WriteLine (curProcess.ProcessName);

C. Use the following code:
foreach (Process curProcess in Process.GetProcesses())
Console.WriteLine (curProcess.ProcessName);

D. Use the following code:
foreach (Process curProcess in Thread.GetProcesses())
Console.WriteLine (curProcess.ProcessName);

Answer: C
Section: (none)

Explanation/Reference:
The GetProcesses method creates and returns an array of Process objects representing all currently running processes in memory.
Because this method invocation does not contain a computer name, the local machine is assumed.
The curProcess variable is reassigned to a Process object with each iteration. The ProcessName property of the Process object retrieves the system name of the process.
The WriteLine method of the Console class outputs the process name to the console. Because the WriteLine method outputs a line return, each process name will be on a separate line in the Console window.

Incorrect Answers:
A, B: The GetSystemProcesses and GetAllProcesses methods do not exist in the Process class.

D: There is no such method as the GetProcesses method in the Thread class.

· Process.GetProcesses !!!

QUESTION 8
Certkiller.com is currently using a performance counter named HitCounter.
You are required to increment each time a user accesses the UI classes within the application.
To do this, you start by creating performance counters using the following code:
GRAFIK - wird nicht für Antwort benötigt !!!
You have to adjust the HitCounter performance counter when a hit occurs.
What should you do?

A. Use the following code:
PerformanceCounter hitCounter = new PerformanceCounter ("ApplicationPerformance', "HitCounter");
hitCounter.ReadOnly = false;
hitCounter.Increment ();
B. Use the following code:
PerformanceCounter hitCounter = new PerformanceCounter ("ApplicationPerformance', "HitCounter");
hitCounter.Increment ();
C. Use the following code:
PerformanceCounter hitCounter = new PerformanceCounter ("ApplicationPerformance', "HitCounter");
hitCounter ++;
D. Use the following code:
PerformanceCounter hitCounter = new PerformanceCounter ("ApplicationPerformance', "HitCounter");
hitCounter.ReadOnly = false;
hitCounter ++;

Answer: A
Section: (none)

Explanation/Reference:
Explanation: This code creates a new PerformanceCounter object that references the ApplicationPerformance category and the HitCounterperformance counter. By default, a performance counter is read-only, so this code sets the ReadOnly property to False. Then, the Increment method is called to increase the counter by one. The PerformanceCounter class also provides an IncrementBy method, which increments the performance counter by the value specified in a provided argument.

Incorrect Answers:
B: You should not use the code fragments that fail to set the ReadOnly property to False because by default, all performance counter objects are read-only. C, D: You should not use the code fragments that use the ++ operator to increment the PerformanceCounter object because this will cause a compile-time error.

· PerformanceCounter wird standardmässig readonly erzeugt und hat eine Increment- bzw. Decrement-Methode.

· ReadOnly, Increment !!!

QUESTION 9
You would like to create a custom performance counter for an application that you created recently.
To do this, you decide to create a custom category named ApplicationPerformance and a performance counter named HitNumber.
You need to ensure that this counter is shared across numerous applications.
What should you do?

A. Use the following code:
PerformanceCounterCategory.Create ("ApplicationPerformance", "ApplicationPerformanceHelp", **PerformanceCounterCategoryType.MultiInstance**, "HitNumber", "HitNumberHelp");
B. Use the following code:
PerformanceCounterCategory.Create ("HitNumber", "HitNumberHelp", **PerformanceCounterCategoryType.SingleInstance**,"ApplicationPerformance" "ApplicationPerformanceHelp");
C. Use the following code:
PerformanceCounterCategory.Create ("HitNumber", "HitNumberHelp", **PerformanceCounterCategoryType.MultiInstance**, "ApplicationPerformance" "ApplicationPerformanceHelp");
D. Use the following code:
PerformanceCounterCategory.Create ("ApplicationPerformance", "ApplicationPerformanceHelp", **PerformanceCounterCategoryType.SingleInstance**, "HitNumber", "HitNumberHelp");

Answer: D
Section: (none)

Explanation/Reference:
Explanation: This code invokes the Create method of the PerformanceCounterCategory class. This method registers a custom category on the local computer. The first two arguments specify the name of the category and category help string, respectively.
The third argument specifies a PerformanceCounterCategoryType enumeration value indicating how many counters can be in use within the specified category.
The value PerformanceCounterCategoryType.SigleInstance indicates that only a single instance can exist for the entire category.
The last two arguments specify the name of the performance counter and the counter's help string, respectively.

Incorrect Answers:
A, C: The code fragments that specify the MultiInstance value should not be used because the scenario requires you to share the same counter across multiple applications.

B: This code fragment incorrectly assigns the value HitNumber to the category name and ApplicationPerformance to the counter name.

· PerformanceCounterCategoryType.SingleInstance: Die Leistungsindikatorkategorie kann nur eine einzelne Instanz haben.
· PerformanceCounterCategoryType.MultiInstance: Die Leistungsindikatorkategorie kann mehrere Instanzen

haben.

· PerformanceCounterCategory.Create ("KategorieName", "KategorieHilfe", PerformanceCounterCategoryType.
SingleInstance,
"CounterName", "CounterHilfe");
· Tipp für Reihenfolge - was ist in der Hierarchie höher, das kommt zuerst (eine Kategorie hat einen Counter - nicht umgekehrt)

QUESTION 10
You are required to launch the App.exe process, and specify sample.txt as the input file.
App.exe will then use the contents of sample.txt to establish the environment's current settings.
You need to ensure that the code you use meets these requirements.
What should you do?

A. Use the following code:
```
Process myProcess = new Process ();
myProcess.StartInfo = new ProcessStartInfo("App.exe sample.txt");
myProcess.Start ();
```
B. Use the following code:
```
Process myProcess = new Process ();
myProcess.StartInfo = new ProcessStartInfo("App.exe");
myProcess.ProcessStartArgs ("sample.txt");
myProcess.Start();
```
C. Use the following code:
```
Process myProcess = new Process ();
myProcess.StartInfo = new ProcessStartInfo("App.exe");
myProcess.Start("sample.txt");
```
D. Use the following code:
```
Process myProcess = new Process ();
myProcess.StartInfo = new ProcessStartInfo("App.exe");
myProcess.StartInfo.FileName = "sample.txt";
myProcess.Start();
```

Answer: D
Section: (none)

Explanation/Reference:
This code creates a new Process object, sets the application to run using the StartInfo property, and uses the FileName property to specify the file to use as input. The StartInfo property of a Process object stores startup information for the process. This includes the application to run and any command-line arguments to be used by the application.
The FileName property must be set, and can be set by either explicitly setting the FileName property or by passing the name of the file to the ProcessStartInfo constructor. The Start method launches the application process with the values specified in the StartInfo property.
In this scenario, the code declares a new Process object named myProcess and then sets the StartInfo property of this process.
The code passes the constructor of the ProcessStartInfo a single argument representing the name of the application, App.exe.
Next, the FileName property is explicitly set with an assignment statement to the value of "sample.txt".
Then, the code call the Start method to launch the application using the values specified in the customized startup settings.

Falsch:
A: You should not use the code that passes a single string containing the application and input file to the ProcessStartInfo constructor.
B: You should not use the code that invokes the ProcessStartArgs method because no such method exists in

the Process class.
C: You should not use the code that invokes the Start method of the Process object specifying the input file because no such method signature exists.

· myProcess.ProcessStartInfo ("App.exe");
· myProcess.StartInfo.FileName = "sample.txt"

· ACHTUNG Antwort C:
· myProcess.Start ("sample.txt"); !!! nur die parameterlose Variante myProcess.Start() ist eine Instanzmethode !!!
· ALLE Aufrufe mit Parameter sind STATIC !!!
· z.B. Process.Start("sample.txt")

QUESTION 11
You work as an application developer at Certkiller .com. Certkiller .com uses an application that calculates monthly payments based upon client input.
You are currently debugging this application using the Microsoft Visual Studio 2005 IDE.
The application contains the following code:

```
public double CalculateMonthlyPayment (Single rate, double principal) {
//Implementation code
}
```

You have discovered that unexpected results are being returned by the application. You would like to pause execution and display a message box containing an error message in the event of a negative or zero rate value is Passed to the CalculateMonthlyPayment method.
You need to ensure that this only occurs during debugging mode.
What should you do?

A. Add the following code to the beginning of the CalculateMonthlyPayment method:
 Debug.Assert(rate > 0, "Rate Error", "Rate must be > zero");
B. Add the following code to the beginning of the CalculateMonthlyPayment method:
 if (rate <= 0)
 MessageBox.Show("Rate is" + rate, Error);
C. Add the following code to the beginning of the CalculateMonthlyPayment method:
 if (rate <= 0)
 Debug.WriteLine("Error Rate is" + rate);
D. Add the following code to the beginning of the CalculateMonthlyPayment method:
 Debug.WriteLineIf(rate <= 0, "Error Rate is" & rate);

Answer: A
Section: (none)

Explanation/Reference:
Explanation: This code makes the debugging assertion that the rate argument is greater than zero.
If it is not, then a message box will be display with the message Rate Error along with the detailed description "Rate must be > zero".
The Assert method of the debug class is an overloaded method that provides you the ability to test assumptions made in your programming logic.
The Assert method accepts three arguments, the first of which is required. This first argument represents a condition that is assumed to be true for your programming logic and will evaluate to a Boolean value.
The other two arguments represent optional string messages. When the Assert method is invoked with three arguments, the condition is evaluated. If the condition evaluates to true, then the program continues to execute. If the condition evaluates to false, the program execution is halted, and by default a modal dialog box is displayed.
This dialog box displays the first string on a single line, the second string on the second line, and then the

location at which the assertion failed.
From this dialog box, you can invoke the debugger, continue execution, or exit the application.
Output generated using the Debug class is stripped out when creating a release version build of an application.

Incorrect Answers:
B: In this scenario, you want the dialog box to display only for debug builds of the application.
Using this code, the message box would display in a release build of the application. C, D: The output of these options will not display in a message box.

· Angabe: ...display a message box...

QUESTION 12
You have recently created an application, and want to capture all debugging text messages generated by it. You would like these debugging messages to display on the command line. The application that you created contains the following code:
Debug.WriteLine ("Start the processing");
Console.WriteLine ("Generated by Console.WriteLine");
Debug.WriteLine ("End the processing");
You need to ensure that you are able to capture all debugging messages to the command line.
What should you do?

A. Use the following code:
 Debug.Listeners.Add (new TextWriterTraceListener(Console.Out));
 Debug.AutoFlush = true;
B. Use the following code:
 Debug.Listeners.Add (new StreamWriter(Console.Out));
 Debug.AutoFlush = true;
C. Use the following code:
 Debug.Listeners.Add (new ConsoleTraceListener());
 Debug.AutoFlush = true;
D. Use the following code:
 Debug.Listeners.Add (new DefaultTraceListener());
 Debug.AutoFlush = true;

Answer: C
Section: (none)

Explanation/Reference:
Explanation: Listeners are used to capture trace and debug messages. Both the Trace and Debug objects share the same Listeners collection, which includes a DefaultTraceListener
that will capture trace and debug messages in the Output window. You are able to override this behavior by using the Add method to add another listener to the Listeners collection.
The ConsoleTraceListener is used to route trace and debug messages to the console. The AutoFlush property should be set to true for immediate capture. This specifies that after each message is written, the buffer is flushed and the output is written to the listener.

Incorrect Answers:
A: You should use the code that instantiates a TextWriterTraceListener object that specifies the Console's output stream because this is less efficient than specifying a ConsoleTraceListener object.
B: You should use the code that instantiates a StreamWriter object that specifies the Console's output stream because the Listeners collection allows only Listener object streams.
D: You should use the code that instantiates a DefaultTraceListener object because this will capture the debugging messages
to the Output window in the Visual Studio .NET 2005 IDE. Also, each Listeners collection will contain a DefaultTraceListener by default.

QUESTION 13
You have created an application to interface with an inventory storage system, and want to enable tracing in the application to track stock shortages and surpluses.
The application should not, however, trace inventory levels if no shortages or surpluses exist.
In addition, you do not want recompile every time to switch tracing capabilities on or off.
What should you do?

A. Specify a command-line argument named InventoryTrace, and configure the application to read the argument.
B. Specify a system-wide environmental variable named InventoryTrace, and configure the application to read the environmental variable.
C. Specify a registry key named InventoryTrace, and configure the application to read the registry key setting.
D. Specify a BooleanSwitch named InventoryTrace, and configure it in the application configuration file.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The BooleanSwitch class is used to toggle trace messages on and off. The application configuration is intended to manage any application-specific settings, including tracing.
The value of the Enabled property determines whether the BooleanSwitch is turned on or off. This value is set in the application configuration file. If the value is 0, then the BooleanSwitch object is turned off and the Enabled property returns false.
If the value is any other value, the BooleanSwitch object is turned on and the Enabled property returns true.

Incorrect Answers:
A: This option requires the application to run from the command-line.
B: This option requires EnvironmentPermission and is intended for more complex application settings.
C: This option requires RegistryPermission and is intended for system-wide settings, not for application-specific settings.

· D - da alle anderen Möglichkeiten Einschränkungen haben (Berechtigung bzw. Start eines Konsolenprogramms)

QUESTION 14
Certkiller .com has a server named Certkiller -SR05 that has numerous processors installed.
You have been given the task of developing an application that displays certain clock speed statistics on all processors installed on Certkiller -SR05.
You need to ensure that this requirement is fully satisfied.
What should you do?

A. Use the following code:
```
ManagementObjectSearcher processorSearcher = new ManagementObjectSearcher();
foreach (ManagementObject obj in processorSearcher.Get("SELECT * FROM Win32_Processor")){
Console.WriteLine ("{0}", obj ["Name"]);
Console.WriteLine ("{0} / {1}",
obj ["CurrentClockSpeed"], Obj ["MaxClockSpeed"]);
}
```

B. Use the following code:
```
ManagementObjectSearcher processorSearcher = new ManagementObjectSearcher( "SELECT * FROM
Win32_Processor");
foreach (ManagementObject obj in processorSearcher.Get()){
Console.WriteLine ("{0}", obj["Name"]);
Console.WriteLine ("{0} / {1}",
obj["CurrentClockSpeed"], obj["MaxClockSpeed"]);
}
```
C. Use the following code:
```
ManagementObjectQuery processorQuery = new ManagementObjectQuery();
foreach (ManagementObject obj in processorQuery.Get ("SELECT * FROM Win32_Processor")){
Console.WriteLine ("{0}", obj["Name"]);
Console.WriteLine ("{0} / {1}",
obj["CurrentClockSpeed"], obj["MaxClockSpeed"]);
}
```
D. Use the following code:
```
ManagementObjectQuery processorQuery = new ManagementObjectQuery( "SELECT * FROM
Win32_Processor");
foreach (ManagementObject obj in processorQuery.Get()){
Console.WriteLine ("{0}", obj ["Name"]);
Console.WriteLine ("{0} / {1}",
obj["CurrentClockSpeed"], obj["MaxClockSpeed"]);
}
```

Answer: B
Section: (none)

Explanation/Reference:
This code retrieve all Win32_Processor objects on the local machine, iterates through each Win32_Processor object,
and displays the Name, CurrentClockSpeed and MaxClockSpeed properties for each Win32_Processor object.
First, the ManagementObjectSearcher object is instantiated with the WQL query string on which to search.
WQL is a subset of SQL, and it is specifically designed for WMI. The WQL string specified in this code returns any 32-bit processors available on the local machine.
The Get method returns a ManagementObjectCollection object. On each iteration, a ManagementObject object is assigned to the variable obj. The Console.WriteLine method display the Name, ClockSpeed, and MaxClockSpeed properties on the command-line using a string indexer.

Incorrect Answers:
A: You should not use the code that specifies the WQL query string as an argument of the Get method of the ManagementObjectSearcher object BECAUSE the Get method does not accept a string data type.

C D: You should not use the code that specifies the ManagementObjectQuery class BECAUSE there is no such class in the .NET 2.0 class library.

· new ManagementObjectSearcher("SELECT * FROM Win32_Processor"); // WQL in Konstruktor
· foreach (ManagementObject obj in processorSearcher.Get()){ ...} // Get ohne ParameterI

· ManagementObjectQuery GIBT ES NICHT !!!

QUESTION 15
You have developed an application that simplifies hard drive management for Certkiller .com's administrators. The application that you created logs all modifications made to physical hard drives on an hourly basis.
You now need to create an EventQuery object for this application.
What should you do?

A. Use the following code:
EventQuery query = new EventQuery ();
query.QueryString = "SELECT InstanceModificationEvent FROM 'Win32_DiskDrive' WITHIN 3600";

B. Use the following code:
EventQuery query = new EventQuery ();
query.QueryString = "SELECT * FROM _InstanceModificationEvent WITHIN 3600 " + "WHERE TargetInstance ISA 'Win32_DiskDrive'";

C. Use the following code:
EventQuery query = new EventQuery ();
query.QueryString = "SELECT * FROM 'Win32_DiskDrive' WITHIN 3600" + "WHERE TargetInstance ISA_InstanceModificationEvent";

D. Use the following code:
EventQuery query = new EventQuery ();
query.QueryString = "SELECT * FROM_InstanceModificationEvent WITHIN 3600" + "WHERE Instance = 'Win32_DiskDrive'";

Answer: B
Section: (none)

Explanation/Reference:
Explanation: This code creates a new EventQueryobject that queries all disk drive events every hour.
The QueryString property contains a string that follows the syntax of WQL. WQL is a subset of SQL, and it is specifically designed for WMI. The SELECT clause indicates retrieval, where the asterisk (*) represents all properties associated with the event.
The FROM clause indicates the event, which in this case is _InstanceModificationEvent. The WITHIN clause specifies the polling interval in seconds. The WHERE clause specifies the condition that must be met. In this scenario, the TargetInstance filed is compared to the value Win32_DiskDrive. This limits the _InstanceModificationEvent events to only those that modify hard drives.

Incorrect Answers:
A: InstanceModificationEvent is not a valid event property and Win32_DiskDrive is not a valid event.
C: The FROM clause should specify the event InstanceModificationEvent and the ISA operator should use the Win32_DiskDrive class.
D: Instance is not a valid field name and the equal sign (=) is not valid for class comparisons.

· WHERE
· ISA operator

· Use the ISA operator in the WHERE clause of a data query to request embedded objects in a class hierarchy.
· SELECT * FROM ClassA WHERE EmbeddedObj ISA
'ClassZ'

QUESTION 16
You are writing a method to compress an array of bytes.
The array is passed to the method in a parameter named document.
You need to compress the incoming array of bytes and return the result as an array of bytes.
Which code segment should you use?

A. MemoryStream strm = new MemoryStream(document);
DeflateStream deflate = new DeflateStream(strm, CompressionMode.Compress);
byte[] result = new byte[document.Lenght];
deflate.Write(result, 0, result.Lenght);
return result;

B. MemoryStream strm = new MemoryStream(document);
DeflateStream deflate = new DeflateStream(strm, CompressionMode.Compress);
deflate.Write(document, 0, document.Lenght);
deflate.Close();
return strm.ToArray();

C. MemoryStream strm = new MemoryStream();
DeflateStream deflate = new DeflateStream(strm, CompressionMode.Compress);
deflate.Write(document, 0, document.Lenght);
deflate.Close();
return strm.ToArray();

D. MemoryStream inStream = new MemoryStream(document);
DeflateStream deflate = new DeflateStream(inStream, CompressionMode.Compress);
MemoryStream outStream = new MemoryStream();
int b;
while ((b = deflate.ReadByte()) != -1) {
outStream. WriteByte((byte)b);
}
return outStream.ToArray();

Answer: C
Section: (none)

Explanation/Reference:
Explanation: The document is compressed and written to a new MemoryStream using the Deflate class. Finally the compressed data can be returned as an array of bytes using the ToArray method of the MemoryStream.

A does not compress and write the document, instead it is compressing and writing an empty array

B & D are reading and writing to the same document.

· Leerer Memorystream
· DeflateStream für memoryStream und CompressionMode.Compress · mit deflateStream die übergebene Array (document) schreiben (was,ab wo, wie gross) · deflateStream schliessen (nun ist der komprimierte Inhalt im memoryStream) · Inhalt des memoryStreams als ByteArray zurückliefern - mit memoryStream.ToArray()

QUESTION 17
You are writing an application that uses SOAP to exchange data with other applications.
You use a Department class that inherits from ArrayList to send objects to another application.
The Department object is named dept.
You need to ensure that the application serializes the Department object for transport by using SOAP.
Which code should you use?

A. SoapFormatter formatter = new SoapFormatter();
bytes[] buffer = new byte[dept.Capacity];
MemoryStream stream = new MemoryStream(buffer);
foreach (object o in dept) {
formatter.Serialize(stream, o);
}

B. SoapFormatter formatter = new SoapFormatter();
bytes[] buffer = new byte[dept.Capacity];
MemoryStream stream = new MemoryStream(buffer);
formatter.Serialize(stream, dept);

C. SoapFormatter formatter = new SoapFormatter();
MemoryStream stream = new MemoryStream();
foreach (object o in dept) {
formatter.Serialize(stream, o);
}

D. SoapFormatter formatter = new SoapFormatter();
MemoryStream stream = new MemoryStream();
formatter.Serialize(stream, dept);

Answer: D
Section: (none)

Explanation/Reference:
Explanation: Simply serialize the entire object to a stream using a SoapFormatter.

A&C attempt to serialize components of the object rather the object itself.

B attempts to serialize to an array, however the array will not be big enough to store the serialized object because it is not sized on the entire object.

QUESTION 18
You are creating a class that performs complex financial calculations.
The class contains a method named GetCurrentRate that retrieves the current interest rate and a variable named currRate
that stores the current interest rate.
You write serialized representations of the class.
You need to write a code segment that updates the currRate variable with the current interest rate when an instance of the class is deserialized.
Which code segment should you use?

A. [OnSerializing]
internal void UpdateValue (StreamingContext context) {
currRate = GetCurrentRate();
}

B. [OnSerializing]
internal void UpdateValue(SerializationInfo info) {
info.AddValue("currentRate", GetCurrentRate());
}

C. [OnDeserializing]
internal void UpdateValue(SerializationInfo info) {
info.AddValue("currentRate", GetCurrentRate());
}

D. [OnDeserialized]
internal void UpdateValue(StreamingContext context) {
currRate = GetCurrentRate();
}

Answer: D
Section: (none)

Explanation/Reference:
Explanation: A method with the OnDeserialized attribute will be called after Deserialization and any instance variables can be set.

A & B the method will fire during serializing, the question is concerned with reconstructing the object during deserialization.

C the OnDeserializing attribute is useful for default values. OnDeserializing attribute works with a method that contains a StreamContext parameter and not a SerializationInfo parameter.

· Formulierung der Frage irreführend.

QUESTION 19
You are writing an application that uses isolated storage to store user preferences.
The application uses multiple assemblies.
Multiple users will use this application on the same computer.
You need to create a directory named Preferences in the isolated storage area that is scoped to the current Microsoft Windows identity and assembly.
Which code segment should you use?

A. IsolatedStrongFile store;
 store = IsolatedStorageFile.GetUserStoreForAssembly();
 store.CreateDirectory("Preferences");
B. IsolatedStrongFile store;
 store = IsolatedStorageFile.GetStoreForAssembly();
 store.CreateDirectory("Preferences");
C. IsolatedStrongFile store;
 store = IsolatedStorageFile.GetUserStoreForDomain();
 store.CreateDirectory("Preferences");
D. IsolatedStrongFile store;
 store = IsolatedStorageFile.GetMachineStoreForApplication();
 store.CreateDirectory("Preferences");

Answer: A
Section: (none)

Explanation/Reference:
The user store for the assembly is the correct store that is required. It is returned by IsolatedStorageFile.GetUserStoreForAssembly().

B,C & D return Isolated Storage File stores of incorrect scope

· Genau lesen: ...is scoped to the current Microsoft Windows identity (User) and assembly ...
· Also IsolatedStorageFile.GetUserStoreForAssembly()

· GetStoreForAssembly gibt es NICHT !!!

QUESTION 20
You need to read the entire contents of a file named Message.txt into a single string variable.
Which code segment should you use?

A. string result = null;
 StreamReader reader = new StreamReader("Message.txt");
 result = reader.Read().ToString();
B. string result = null;
 StreamReader reader = new StreamReader("Message.txt");
 result = reader.ReadToEnd();

C. string result = string.Empty;
StreamReader reader = new StreamReader("Message.txt");
while (!reader.EndOfStream) {
result + = reader.ToString();
}

D. string result = null;
StreamReader reader = new StreamReader("Message.txt");
result = reader.ReadLine();

Answer: B
Section: (none)

Explanation/Reference:
Explanation: Create a StreamReader based on the file and call the ReadToEnd() method to quickly read the entire file and return a string.

A & D does not read the entire file.

C calling ToString() on the reader will give a string representation of the stream and will not read from the stream.

· ReadToEnd

· Read liest nur ein Zeichen !!!

QUESTION 21
You need to write a code segment that transfers the first 80 bytes from a stream variable named stream1 into a new byte array named byteArray.
You also need to ensure that the code segment assigns the number of bytes that are transferred to an integer variable
named bytesTransferred.
Which code segment should you use?

A. bytesTransferred = stream1.Read(byteArray,0, 80);

B. for (int i = 0; i <80; i++) {
stream1.WriteByte(byteArray[i]);
bytesTransferred = i;
if (!stream1.CanWrite) {
break;
}
}

C. while (bytesTransferred < 80) {
stream1.Seek(1, SeekOrigin.Current);
byteArray[bytesTransferred++] = Convert.ToByte(stream1.ReadByte()); }

D. stream1.Write(byteArray, 0, 80);
bytesTransferred = byteArray.Length;

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The Read() method accepts a byte array and the start position and number of bytes to read as parameters.

B & D The question indicates that data should be read from the stream not written to it.

C it is unnecessary to attempt to read byte by byte, the Read() method provides a very efficient way of reading into a byte array.

QUESTION 22
You are writing a method that accepts a string parameter named message.
Your method must break the message parameter into individual lines of text and pass each line to a second method named Process.
Which code segment should you use?

A. StringReader reader = new StringReader(message);
 Process(reader.ReadToEnd());
 reader.Close();
B. StringReader reader = new StringReader(message);
 while (reader.Peek() != -1) {
 string line = reader.Read().ToString();
 Process(line);
 }
 reader.Close();
C. StringReader reader = new StringReader(message);
 Process(reader.ToString());
 reader.Close();
D. StringReader reader = new StringReader(message);
 while (reader.Peek() != -1) {
 Process(reader.ReadLine());
 }
 reader.Close();

Answer: D
Section: (none)

Explanation/Reference:
Explanation: StringReader.ReadLine() allows for lines to be read line by line.

A ReadToEnd() will read the entire stream.

B Read() will not read the line but only the next character.

C will not read from the message but will just give a string representation of the reader.

· ReadLine !!!

QUESTION 23
You need to write a code segment that transfers the contents of a byte array named dataToSend by using a NetworkStream object named netStream.
You need to use a cache of size 8,192 bytes.
Which code segment should you use?

A. MemoryStream memStream = new MemoryStream(8192);
 memStream.Write(dataToSend, 0, (int) netStream.Length);
B. MemoryStream memStream = new MemoryStream(8192);
 netStream.Write(dataToSend, 0, (int) memStream.Length);
C. BufferedStream bufStream = new BufferedStream(netStream, 8192);
 bufStream.Write(dataToSend, 0, dataToSend.Length);

D. BufferedStream bufStream = new BufferedStream(netStream);
bufStream.Write(dataToSend, 0, 8192);

Answer: C
Section: (none)

Explanation/Reference:
Explanation: To send data using a cache it is necessary to use a BufferedStream. The BufferedStream should be created with the cache size of 8192 bytes.

A & B do not employ caching.

D does not correctly initialise the BufferedStream to have a cache size of 8192 bytes.

· BufferedStream und Buffergrösse im Konstruktor angeben !!!

QUESTION 24
You need to serialize an object of type List<int> in a binary format.
The object is named data.
Which code segment should you use?

A. BinaryFormatter formatter = new BinaryFormatter();
MemoryStream stream = new MemoryStream();
formatter.Serialize(stream, data);
B. BinaryFormatter formatter = new BinaryFormatter();
MemoryStream stream = new MemoryStream();
for (int i= 0;i <data.Count; i++) {
formatter.Serialize(stream, data[i]);
}
C. BinaryFormatter formatter = new BinaryFormatter();
byte[] buffer = new byte[data.Count];
MemoryStream stream = new MemoryStream(buffer, true);
formatter.Serialize(stream, data);
D. BinaryFormatter formatter = new BinaryFormatter();
MemoryStream stream = new MemoryStream();
data.ForEach(delegate(int num){
formatter.Serialize(stream, num);
});

Answer: A
Section: (none)

Explanation/Reference:
Explanation: create a BinaryFormatter and a MemoryStream and simply use the formatter to serialize the data to the stream.

B Collections support serialization, hence it is not required to try to serialize each item independently.

C The MemoryStream is created to be non resizeable and it is not the correct size.

QUESTION 25
Certkiller.com has given you the task of serializing an object and writing it to a data file using binary serialization.
You need to ensure that you meet these requirements.
What should you do?

A. Use the following code:
```
object obj = new object();
Stream objSream = File.Open("DataFile.dat", FileMode.Create);
BinaryFormatter objFormatter = new BinaryFormatter ();
objFormatter.Serialize(objStream, obj);
```
B. Use the following code:
```
object obj = new object();
BinaryFormatter objFormatter = new BinaryFormatter ();
objFormatter.Serialize(obj);
```
C. Use the following code:
```
Stream objSream = File.Open("DataFile.dat", FileMode.Create);
BinaryFormatter objFormatter = new BinaryFormatter ();
objFormatter.Serialize(objStream);
```
D. Use the following code:
```
object obj = new object();
Stream objSream = File.Open ("DataFile.dat", FileMode.Create);
BinaryFormatter objFormatter = new BinaryFormatter ();
objFormatter.Serialize(obj, objStream);
```

Answer: A
Section: (none)

Explanation/Reference:
Explanation: This code instantiates an object named obj, opens a file stream, instantiates a BinaryFormatter object, and serializes the obj object to the DataFile.dat file. The File.Open method takes a file path string and FileMode enumeration value as arguments and returns a FileStream object. The Serialize method of the BinaryFormatter class takes two arguments: a stream and the object to be serialized. The Serialize method uses the stream to write the object to the destination.

Incorrect Answers:
B, C, D: If you use these options it will cause a compile-time error.

· ACHTUNG
· objFormatter.Serialize(objStream, obj); //RICHTIG
· NICHT
· objFormatter.Serialize(obj, objStream); //FALSCH

QUESTION 26
You have recently created a serializable class named Vehicle.
The class is shown below:
```
[Serializable]
public class Vehicle{
public string VIN;
public string Make;
public string Model;
public string Year;
}
```
You are planning to create a custom formatter class to control the formatting of Vehicle objects when they are serialized.
You need to ensure that is achieved with as little development effort as possible.
What should you do?

A. Use the following code:
```
public class VehicleFormatter : Formatter{
//Implementation omitted
}
```

B. Use the following code:
```
public class VehicleFormatter : IGenericFormatter{
//Implementation omitted
}
```
C. Use the following code:
```
public class VehicleFormatter : IFormatConverter{
//Implementation omitted
}
```
D. Use the following code
```
public class VehicleFormatter : IFormatter{
//Implementation omitted
}
```

Answer: D
Section: (none)

Explanation/Reference:
When implementing the IFormatter interface, you must provide implementation for two methods and three properties.
The two methods, Serialize and Deserialize control how objects will be stored from memory and loaded into memory, respectively. Both methods accept a Stream object as an argument. The Serialize method also takes a generic object as its second argument and uses the Stream argument to write the object.
The Deserialize method returns the object using the Stream argument. The Binder, Context, and Surrogate Selector properties must also be implemented.

Incorrect Answers:
A: The Formatter class requires more development effort than necessary.
B: The IGenericFormatter interface does not exist.
C: The IFormatConverter interface does not control formatting during serialization.

· IFormatter !!! - nur die Methoden Serialize bzw. Deserialize · (Formatter wдre viel aufwendiger aufwendig - die ganzen WriteMethoden usw.)

QUESTION 27
You develop a serializable class for persisting objects as files.
Every time an object is serialized, you have to update the database with the name of the object and location of that file.
You elect to employ the OnSerialized attribute to achieve this objective.
You now need to apply the OnSerialized attribute to a certain method.
What should you do?

A. Apply the OnSerialized attribute to the following method:
```
public void AfterSerialization (object sender, SerializationEventArgs e){
//Update database
}
```
B. Apply the OnSerialized attribute to the following method:
```
public void AfterSerialization (object sender){
//Update database
}
```
C. Apply the OnSerialized attribute to the following method:
```
public void AfterSerialization (StreamingContext context){
//Update database
}
```

D. Apply the OnSerialized attribute to the following method:
public StreamingContext AfterSerialization (){
//Update database
}

Answer: C
Section: (none)

Explanation/Reference:
This method contains the correct method signature to have the OnSerialized attribute applied. The method must accept a StreamingContext as an argument for accessing the read/write stream during serialization/ deserialization.

Incorrect Answers:
A, B, D: You should not apply the OnSerialized attribute to these methods because they do not accept a StreamingContext as an argument.

· NUR StreamingContext !!!

QUESTION 28
You have recently created a serializable class named Vehicle.
The class is shown below:

```
[Serializable]
public class Vehicle {
public string VIN;
public string Make;
private string Model;
private int Year;
private string Owner;
}
```

Certkiller .com does not want the Owner field to be persisted when a Vehicle object is serialized, for security reasons.
You need to ensure that this objective is fulfilled.
What should you do?

A. Apply the OptionalField attribute to the Owner field.
B. Apply the NonSerialized attribute to the Owner field.
C. Have the Vehicle class implement the IFormatter interface for custom serialization.
D. Do nothing because, when using binary serialization, Private fields are never persisted.

Answer: B
Section: (none)

Explanation/Reference:
This will ensure that the Owner field will not be serialized, but it will allow all other fields to be serialized normally.

Incorrect Answers:
A: This option would be used for deserialization.
C: This option would require excessive developer effort.
D: This is incorrect because all fields marked private or otherwise are persisted when using binary serialization.

· NonSerialized !!!

QUESTION 29
You have recently written the code shown below:

```
Hashtable emailAddresses = new Hashtable ();
emailAddresses.Add ("Mia", "mia@ Certkiller .com");
emailAddresses.Add ("Andy", "andy@ Certkiller .com");
emailAddresses.Add ("Kara", "kara@ Certkiller .com");
FileStream stream = new FileStream ("Email.dat", FileMode.Create);
BinaryFormatter formatter = new BinaryFormatter ();
formatter.Serialize (stream, emailAddresses);
```

You need to ensure that you are able to load the emailAddresses object from the Email.dat file into your application.
What should you do?

A. Use the following code:
```
FileStream readStream = new FileStream("Email.dat", FileMode.Open);
HashTable loadEmails = readStream.Deserialize();
```
B. Use the following code:
```
FileStream readStream = new FileStream ("Email.dat", FileMode.Open);
BinaryFormatter readFormatter = new BinaryFormatter();
HashTable loadEmails = readFormatter.Deserialize(readStream);
```
C. Use the following code:
```
FileStream readStream = new FileStream("Email.dat", FileMode.Open);
BinaryFormatter readFormatter = new BinaryFormatter ();
HashTable loadEmails = (HashTable)readFormatter.Deserialize(readStream);
```
D. Use the following code:
```
FileStream readStream = new FileStream ("Email.dat", FileMode.Open);
HashTable loadEmails = (HashTable)readFormatter.ReadObject ();
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This instantiates a BinaryFormatter object, and deserializes the emailAddresses object from the Email.dat file.
The FileStream constructor takes a file path string and FileMode enumeration value as arguments.
The Deserialize method of the BinaryFormatter class takes the stream of the object to be deserialized and returns a generic object.
This generic object must be cast or converted to the HashTable data type.

Incorrect Answers:
A, D: You should not use the code fragments that do not instantiate the BinaryFormatter object because the ReadObject and Deserialize methods do not exist in the FileStream class.
B: You should not use the code that does not cast or convert the return value of the Deserialize method because the Deserialize method returns a generic object.

· BinaryFormatter und CASTING !!!

QUESTION 30
you have recently written the code shown below:

```
Hashtable emailAddresses = new Hashtable ();
emailAddresses.Add ("Mia", "mia@ Certkiller .com");
emailAddresses.Add ("Andy", "andy@ Certkiller .com");
emailAddresses.Add ("Kara", "kara@ Certkiller .com");
```

You need to ensure that these e-mail addresses are stored in the Email.dat file so that you can load them again

when the user restarts the application.
What should you do?

A. Add the following code:
 FileStream stream = new FileStream ("Email.dat", FileMode.Create);
 BinaryFormatter formatter = new BinaryFormatter ();
 formatter.Deserialize(stream, emailAddresses);
B. Add the following code:
 FileStream stream = new FileStream ("Email.dat", FileMode.Create);
 BinaryFormatter formatter = new BinaryFormatter ();
 formatter.Serialize(stream, emailAddresses);
C. Add the following code:
 FileStream stream = new FileStream ("Email.dat", FileMode.Create);
 stream.Serialize(emailAddresses);
D. Add the following code:
 FileStream stream = new FileStream ("Email.dat", FileMode.Create);
 stream.WriteObject(emailAddresses);

Answer: B
Section: (none)

Explanation/Reference:
This code instantiates a file stream, instantiates a BinaryFormatter object, and serializes the emailAddresses object to the Email.dat file. The FileStream constructor takes a file path string and FileMode enumeration as arguments. The Serialize method of the BinaryFormatter class takes two arguments, a stream and the object to be serialized.
The Serialize method uses the stream to write the object to the destination.

Incorrect Answers:
A: You should not add the code that invokes the Deserialize method of the BinaryFormatter class because you must serialize the object first. C D: You should not add the code fragments that do not instantiate the BinaryFormatter object
because the WriteObject and Serialize methods do not exist in the FileStream class.

· Achtung die Frage meint Serialisierung und nicht Kontrolle mit Deserialisierung · dann ist es einfach oder !!!

QUESTION 31
You have recently completely creating a new application for Certkiller .com.
This new application has to load an instance of the Inventory class from a large file named Inventory.dat.
You need to ensure that the application executes the loading process in as little time as possible.
What should you do?

A. Use the following code:
 FileStream readStream = new FileStream ("Inventory.dat", FileMode.Open);
 BinaryFormatter readFormatter = new BinaryFormatter ();
 Inventory currentInventory = (Inventory) readFormatter.FastDeserialize(readStream);
B. Use the following code:
 FileStream readStream = new FileStream ("Inventory.dat", FileMode.Open);
 BinaryFormatter readFormatter = new BinaryFormatter ();
 Inventory currentInventory = (Inventory)readFormatter.Deserialize (readStream);
C. Use the following code:
 FileStream readStream = new FileStream ("Inventory.dat", FileMode.Open);
 BinaryFormatter readFormatter = new BinaryFormatter ();
 Inventory currentInventory = (Inventory)readFormatter.UnsafeDeserialize(readStream);

D. Use the following code:
```
FileStream readStream = new FileStream ("Inventory.dat", FileMode.Open);
BinaryFormatter readFormatter = new BinaryFormatter ();
Inventory currentInventory = (Inventory)readFormatter.SafeDeserialize(readStream);
```

Answer: C
Section: (none)

Explanation/Reference:
This code instantiates a file stream, instantiates a BinaryFormatter object, and deserializes an Inventory object to the Inventory.dat file.
The UnsafeDeserialize and Deserialize methods perform the same operation, but the UnsafeDeserialize method uses
unmanaged code and requires more permission.
Because the UnsafeDeserialize method uses unmanaged code, your code should be granted full trust to execute properly.
The UnsafeDeserialize method of the BinaryFormatter class takes two arguments, the stream of the object to be deserialized
and the HeaderHandler object to deal with any binary headers. The UnsafeDeserialize method returns a generic object that must be cast or converted to the Inventory data type.

Incorrect Answers:
A, D: You should not use the code that invokes the FastDeserialize and SafeDeserialize methods because no such methods exist for the BinaryFormatter class.

B: You should not use the code that invokes the Deserialize method because the UnsafeDeserialize method yields better performance.

· UnsafeDeserialize - Methode mit Casting !!! SCHNELLER als Deserialize (unmanaged code !!!)

QUESTION 32
Certkiller .com has asked you to develop an application that displays the properties for all Certkiller.com's network drives.
The information generated by this application will be utilized by Certkiller .com's network administrators to verify client setups.
You need to ensure that these requirements are fully satisfied.
What should you do?

A. Use the following code:
```
public void EnumerateNetworkDrives (){
foreach (Drive netDrive in Drive.GetDrives()){
if (netDrive.DriveType == DriveType.Network)
Console.WriteLine ("{0} ({1}) : {2} bytes", netDrive.Name, netDrive.VolumeLabel,netDrive.TotalSize);
}
}
```
B. Use the following code:
```
public void EnumerateNetworkDrives (){
foreach (DriveInfo netDrive in DriveInfo.GetDrives()){
Console.WriteLine ("{0} ({1}) : {2} bytes", netDrive.Name, netDrive.VolumeLabel,netDrive.TotalSize);
}
}
```

C. Use the following code:
```
public void EnumerateNetworkDrives (){
foreach (DriveInfo netDrive in DriveInfo.GetDrives()){
if (netDrive.DriveType == DriveType.Network)
Console.WriteLine ("{0} ({1}) : {2} bytes", netDrive.Name, netDrive.VolumeLabel,netDrive.TotalSize);
}
}
```
D. Use the following code:
```
public void EnumerateNetworkDrives (){
foreach (DriveInfo netDrive in DriveInfo.GetDrives(DriveType.Network)){
Console.WriteLine ("{0} ({1}) : {2} bytes", netDrive.Name, netDrive.VolumeLabel,netDrive.TotalSize);
}
}
```

Answer: C
Section: (none)

Explanation/Reference:
The GetDrives method is invoked and returns an array of DriveInfo objects representing the available drives. The DriveType property is used to verify that the netDrive variable is a network drive. The DriveType property returns a DriveType enumeration value that can be Network, Fixed, CDRom, or Removable.
If the DriveType property is DriveType.Network, then the Console.WriteLine method displays the Name, VolumeLabel
and TotalSize properties of the DriveInfo object to the console.

Incorrect Answers:
A: You should not use the code that uses the Disk class because there is no such class in the System.IO namespace.

B D: You should not use the code fragments that do not retrieve the DriveType property of the DriveInfo object because there is no such signature for the GetDrives method and no such method as GetNetworkDrives.

· public static DriveInfo[] GetDrives () !!! (keine Parameter möglich !!!)

QUESTION 33
Certkiller.com has asked you to create an application to display all of the top directories based on the drive path. You need to ensure that the application displays the number of files within top-level directories.
What should you do?

A. Use the following code:
```
public void DisplayDriveDirectories (string drivePath)
{ if (Directory.Exists(drivePath)){
foreach (String dirPath in Directory.GetDirctories(drivePath)){
DirectoryInfo dir = new DirectoryInfo (drivePath);
int numFiles = dir.TotalFiles;
Console.WriteLine( "{0} : {1} files.", dir.Name, numFiles); }
}
}
```

B. Use the following code:
```
public void DisplayDriveDirectories (string drivePath)
{ if (Directory.Exists (drivePath)){
foreach (String dirPath in Directory.GetDirctories (drivePath)){
DirectoryInfo dir = new DirectoryInfo(drivePath);
int numFiles = dir.Length;
Console.WriteLine( "{0} : {1} files.", dir.Name, numFiles); }
}
}
```
C. Use the following code:
```
public void DisplayDriveDirectories (string drivePath)
{ if (Directory.Exists(drivePath)){
foreach (String dirPath in Directory.GetDirctories(drivePath)){
DirectoryInfo dir = new DirectoryInfo(drivePath);
int numFiles = dir.GetFiles().Length;
Console.WriteLine( "{0} : {1} files.", dir.Name, numFiles); }
}
}
```
D. Use the following code:
```
public void DisplayDriveDirectories (string drivePath)
{ if (Directory.Exists(drivePath)){
foreach (String dirPath in Directory.GetDirctories (drivePath)){
DirectoryInfo dir = new DirectoryInfo (drivePath);
int numFiles = dir.Size;
Console.WriteLine( "{0} : {1} files.", dir.Name, numFiles); }
}
}
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This code iterates through each top level of a given drive path and displays the Name property and number of files.
First, the Exists method verifies that the drive path exists. Then, the GetDirectories method is invoked and returns a string array of directory paths.
GetDirectories takes a directory path as an argument.
Then a DirectoryInfo object is instantiated using the dirPath variable as it is updated with each iteration.
The number of files in the directory is evaluated by using the GetFiles method, which returns an array of FileInfo objects and retrieves the Length Property of the array.
The value is assigned to the numFiles variable.
The DirectoryInfo object represents metadata about a directory instance. The Console.WriteLine method displays the Name property of the DirectoryInfo object and the numFiles variable.

Incorrect Answers:
A, B, D: The TotalFiles, Length, and Size properties do not exist in the DirectoryInfo class.

· directoryInfo.GetFiles().Length !!!

QUESTION 34
Certkiller .com has asked you to create a file management application to monitor the hosts file.
Certkiller .com has instructed you to change the hosts file if it has been changed.
You, therefore, need to display the size and whether the hosts file is set to read-only.
What should you do?

A. Use the following code:
FileInfo hosts = new FileInfo(@"C:\Windows\system32\drivers\etc\hosts");
Console.WriteLine ("ReadOnly?" + hosts.**IsReadOnly**);
Console.WriteLine ("Size?" + hosts.**Length**);

B. Use the following code:
File hosts = new File(@"C:\Windows\system32\drivers\etc\hosts");
Console.WriteLine ("ReadOnly?" + hosts.**IsReadOnly**);
Console.WriteLine ("Size?" + hosts.**Length**);

C. Use the following code:
File hosts = new File(@"C:\Windows\system32\drivers\etc\hosts");
Console.WriteLine ("ReadOnly?" + hosts.**GetReadOnly**);
Console.WriteLine ("Size?" + hosts.**GetLength**);

D. Use the following code:
FileInfo hosts = new FileInfo(@"C:\Windows\system32\drivers\etc\hosts");
Console.WriteLine ("ReadOnly?" + hosts.**IsReadOnly**);
Console.WriteLine ("Size?" + hosts.**Size**);

Answer: A
Section: (none)

Explanation/Reference:
Explanation: This code instantiates a FileInfo object using a file path string and outputs the IsReadOnly and Length properties to the command line. The FileInfo object represents the information about a system file. The FileInfo class contains common properties and methods for reading and setting file metadata and contents.
The ISReadOnly property returns a Boolean value indicating whether the file is set to read- only.
The Length property returns the size of the file in bytes.

Incorrect Answers:
B C: You should not use the code that instantiate a File object because the File class does not contain an ISReadOnly or Length property and is a static class. Also, you should not use the code fragments that specify the Size property because no such property exists.
D: You should not use the code fragments that specify the Size method because no such methods exist.

· FileInfo IsReadOnly und Length Properties

QUESTION 35
You have recently completed the creation of a new application.
Certkiller .com requires you to ensure that this new application creates a file that contains an array of bytes.
What should you do?

A. Use the following code:
public void WriteBytes (byte [] bytes){
FileStream fs = new FileStream ("C:\\file.txt", FileMode.Create);
for (int i = 0; i < bytes.Length - 1; i++)
fs.Write(bytes [i]);
fs.Close ();
}

B. Use the following code:
public void WriteBytes (byte [] bytes){
FileStream fs = new FileStream ("C:\\file.txt", FileMode.Create);
for (int i = 0; i < bytes.Length - 1; i++)
fs.WriteByte(bytes [i]);
fs.Close ();
}

C. Use the following code:
```
public void WriteBytes (byte [] bytes){
FileStream fs = new FileStream ("C:\\file.txt", FileMode.Create);
fs.WriteByte(bytes, 0, bytes.Length);
fs.Close ();
}
```
D. Use the following code:
```
public void WriteBytes (byte [] bytes){
FileStream fs = new FileStream ("C:\\file.txt", FileMode.Create);
fs.Write(bytes, 0, bytes.Length);
fs.Close ();
}
```

Answer: C
Section: (none)

Explanation/Reference:
Answer D
The FileStream constructor accepts a string argument as the file path and a FileMode enumeration value.
The FileMode enumeration value indicates the file stream will be used, and includes the values Append, Create, CreateNew, Open, and Truncate.
The FileMode.Create value indicates a new file will be created or, if one already exists, that it will be overwritten.
The FileStream class includes a Write method for writing an array of bytes.
The Write method takes a byte array, offsetvalue and total number of bytes as arguments.
The other method, WriteByte, takes a single argument of the type of byte, and it requires manual iteration to write an array.
Like all streams, the FileStream object has a Close method, which should be called after work is done with the stream.

Incorrect Answers:
A, C: You should not use the code fragments that invokes the Write method or the WriteBytes method with only one argument because no such signatures exists in the FileStream class.

B: This code is unnecessary because the FileStream class also contains a Write method that takes a byte array as an argument.

· Achtung: Es gibt nur

· fileStream.Write(ByteArray, Startindex, Anzahl);

· und

· fileStream.WriteByte(byte myByte); // nur ein Byte !!!

QUESTION 36
You are currently in the process of creating an application that reads binary information from a file.
You need to ensure that the only the first kilobyte of data is retrieved.
What should you do?

A. Use the following code:
```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
BufferedStream bs = new BufferedStream (fs);
byte [ ] bytes = new byte [1023];
bs.Read (bytes, 0, bytes.Length);
bs.Close ();
for (int i = 0; i < bytes.Length-1; i++)
Console.WriteLine ("{0} : {1}", I, bytes [i]);
```
B. Use the following code:
```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
byte [ ] bytes = new byte [1023];
fs.Read (bytes, 0, bytes.Length);
fs.Close ();
for (int i = 0; i < bytes.Length-1; i++)
Console.WriteLine ("{0} : {1}", I, bytes [i]);
```
C. Use the following code:
```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
BufferedStream bs = new BufferedStream (fs);
byte [ ] bytes = new byte [1023];
bytes = bs.ReadAllBytes (0, 1023);
bs.Close ();
for (int i = 0; i < bytes.Length-1; i++)
Console.WriteLine ("{0} : {1}", I, bytes [i]);
```
D. Use the following code:
```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
BufferedStream bs = new BufferedStream (fs);
byte [ ] bytes = new byte [1023];
bs.Read (bytes);
bs.Close ();
for (int i = 0; i < bytes.Length-1; i++)
Console.WriteLine ("{0} : {1}", I, bytes [i]);
```

Answer: B
Section: (none)

Explanation/Reference:
The FileStream constructor accepts a string argument as the file path and a FileMode enumeration value.
The FileMode enumeration value indicates the file stream will be used, and includes the values Append, Create, CreateNew, Open, and Truncate.
The FileMode.Open value indicates a file will be opened if existing, or else a FileNotFoundException object will be thrown.
An array of 1024 bytes is instantiated.
The Read method takes the byte array, offset value, and total number of bytes as arguments. The other method ReadByte returns a single byte at a time, but it requires manual iteration to write an array.
Like all streams, the FileStream object has a Close method, which should be called after work is done with the stream.
The Console.WriteLine method is invoked to display the byte index and byte value.

Incorrect Answers:
A, C, D: You should not use the code that specifies a buffered stream BECAUSE the FileStream class IS ALREADY a buffered stream. Also, you should not use the code fragments that invoke the ReadAllBytes method and
the Read method with the incorrect arguments because no such method signatures exist.

· FileStream ist ein BufferedStream und kann daher direkt verwendet werden !!!

QUESTION 37
You are in the process of creating a new application.
This new application has to be able to read all data from a text file.
What should you do?

A. Use the following code:
```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
StreamReader sr = new StreamReader (fs);
string data = sr.ReadToEnd ();
sr.Close ();
Console.WriteLine (data);
```
B. Use the following code:
```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
string data = sr.ReadToEnd ();
fs.Close ();
Console.WriteLine (data);
```
C. Use the following code:
```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
StringBuilder data = new StringBuilder();
string data;
while (sr.Peek () > -1)
data += sr.ReadLine ();
sr.Close ();
Console.WriteLine (data);
```
D. Use the following code:
```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
StreamReader sr = new StreamReader (fs);
StringBuilder data = new StringBuilder ();
while (sr.Peek () > -1)
data.Append (sr.ReadLine ());
sr.Close ();
Console.WriteLine (data.ToString ());
```

Answer: A
Section: (none)

Explanation/Reference:
The FileStream constructor accepts a string argument as the file path and a FileMode enumeration value.
The FileMode enumeration value indicates the file stream will be used, and includes the values Append, Create, CreateNew, Open, and Truncate.
The FileMode.Open value indicates a file will be opened if existing, or else a FileNotFoundException object will be thrown.
A StreamReader object is instantiated using the FileStream object as input. The ReadToEnd method returns a string representing all data from that position to the end of the file.
There are two other read methods, ReadLine and ReadBlock. The ReadLine method returns a string representing all data from that position to the end of a line return.
The ReadBlock method takes a character array, offset value and total number of characters as arguments.
Like all streams, the StreamReader object has a Close method, which should be called after work is done with the stream.
The Console.WriteLine method is invoked to display the data to the console.

Incorrect Answers:
B: You should not use the code that does not specify the StreamReader class because the FileStream class does not contain a ReadToEnd method.
C: You should not use the code that specifies a string object when invoking the ReadLine method rather than a StringBuilder object. The string object is less efficient than StringBuilder objects when performing concatenation operations.

D: This code should not be used because it manually iterates through the file using the ReadLine method, whereas the ReadToEnd method is more efficient.

· StreamReader und StreamReader.Close() - schliesst den verwendeten FileStream.

QUESTION 38
You work as an application developer at Certkiller .com. You are currently in the process of creating a new application for Certkiller .com. You are required to read compressed data files that has been sent by Certkiller . com's sales offices.
These data files are less than 4 GB in size, but was compressed without cyclic redundancy. You want to write a method that receives the compressed files and return the uncompressed data as a byte array.
What should you do?

A. Use the following code:
```
public byte [] DecompressFile(string file){
FileStream fs = new FileStream(file, FileMode.Open);
DeflateStream cs = new DeflateStream(fs, CompressionMode.Decompress, true);
byte [ ] data = new byte [fs.Length - 1];
cs.Read(data, 0, data.Length);
cs.Close ();
return data;
}
```
B. Use the following code:
```
public byte [] DecompressFile(string file){
FileStream fs = new FileStream(file, FileMode.Open);
GZipStream cs = new GZipStream(fs, CompressionMode.Decompress);
byte [ ] data = new byte [fs.Length - 1];
cs.Read(data, 0, data.Length);
return data;
}
```
C. Use the following code:
```
public byte [] DecompressFile(string file){
FileStream fs = new FileStream(file, FileMode.Open);
DeflateStream cs = new DeflateStream (fs, CompressionMode.Decompress);
byte [ ] data = new byte [fs.Length - 1];
cs.Read(data, 0, data.Length);
return data;
}
```
D. Use the following code:
```
public byte [] DecompressFile (string file){
FileStream fs = new FileStream (file, FileMode.Open);
GZipStream cs = new GZipStream (fs, CompressionMode.Decompress, true);
byte [ ] data = new byte [fs.Length - 1];
cs.Read (data, 0, data.Length);
cs.Close ();
return data;
}
```

Answer: A
Section: (none)

Explanation/Reference:
The DeflateStream uses the LZ77 and Huffman coding algorithms for lossless compression and decompression without cyclic redundancy.
The DeflateStream constructor takes a stream (in this case an input stream), a CompressionMode enumeration value,

and a Boolean value indicating whether to keep the stream open. The CompressionMode enumeration value indicates whether to compress or decompress the specified stream
using the values Compress and Decompress, respectively. The Read method takes the byte array, offset value, and total number of bytes as arguments. In this code, the compressed data is read from the FileStream object associated with the DeflateStream object,
and it is stored in the byte array.
Like all streams, the DeflateStream object has a Close method, which should be called after work is done with the stream.
Finally, the resulting byte array is returned.

Incorrect Answers:
B, D: You should not use the code fragments that specify the GZipStream class because this data format includes a data corruption check during decompression.
C: You should not use the code fragments that instantiates the Stream objects and invoke the Read method with the wrong arguments.

· DeflateStream (NO data corruption check)
· CompressionMode.Decompress bzw. CompressionMode.Compress · Read-Methode bzw. Write-Methode

· Warum ist C fasch ??? - kein Close !!!

QUESTION 39
Certkiller .com has a file server named Certkiller -SR07 that stores old inventory files. Certkiller .com has given you the task of creating an application to archive these old inventory files.
The inventory files have to be compressed prior to being uploaded to Certkiller .com's Web server.
You are currently writing a method that will receive a byte array and compress it into a new file.
You need to ensure that a data corruption check takes place during the decompression process.
What should you do?

A. Use the following code:
```
public void CompressFileWrite(string file, byte[] data){
FileStream fs = new FileStream(file, FileMode.Create);
DeflateStream cs = new DeflateStream( fs, Compressionmode.Compress, true);
cs.Write (data, 0, data.Length);
cs.Close();
}
```
B. Use the following code:
```
public void CompressFileWrite(string file, byte[] data){
FileStream fs = new FileStream (file, FileMode.Create);
GZipStream cs = new GZipStream( fs, Compressionmode.Compress, true);
cs.Compress (data, 0, data.Length);
cs.Close ();
}
```
C. Use the following code:
```
public void CompressFileWrite(string file, byte[] data){
FileStream fs = new FileStream(file, FileMode.Create);
DeflateStream cs = new DeflateStream( fs, Compressionmode.Compress, true);
cs.Compress(data, 0, data.Length);
cs.Close ();
}
```

D. Use the following code:

```
public void CompressFileWrite (string file, byte[] data){
FileStream fs = new FileStream(file, FileMode.Create);
GZipStream cs = new GZipStream( fs, Compressionmode.Compress, true);
cs.Write(data, 0, data.Length);
cs.Close();
}
```

Answer: D
Section: (none)

Explanation/Reference:
Explanation:
Incorrect Answers:
A, B, C: You should not use the code fragments that specify the DeflateStream class because this data format does not ensure that a data corruption check occurs during decompression. You should also not use the code that invokes the Compress method because no such method exists in the GZipStream or the DeflateStream classes.

· GZIP HAT data corruption check
· CompressionMode.Decompress bzw. CompressionMode.Compress · Read-Methode bzw. Write-Methode

QUESTION 40
You define the following regular expression of currency values:

```
regex tx = new regex("^-?\d+(\.\d{2})?$")
```

You are required to write code that will be used to find whether a string in the variable named Bill matches the regular expression or not. You are also required to use this code as the expression in a conditional statement and need to know which code segment to use.
What should you do?

A. The tx.Matches(Bill)
B. The tx.Equals(Bill)
C. The tx.Match(Bill)
D. The tx.IsMatch(Bill)

Answer: D
Section: (none)

Explanation/Reference:
In order for you to successfully indicate whether the regular expression finds a match in the input string you should make use of the IsMatch(Bill) segment in the scenario.

Incorrect Answers:
A: This segment should not be used in the scenario because the Matches method is used to search an input string for all occurrences of a regular expression and returns all the successful matches.

B: This segment should not be used in the scenario because this method is used to determine whether any two Object instances are equal.

C: This segment should not be used in the scenario because the Match method is used to search an input string for an occurrence of a regular expression and returns the precise results as a single successful match.

· IsMatch(...) liefert True bzw. False !!!

QUESTION 41
You work as the application developer at Certkiller .com.
Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application that will be used for

geographical mapping. Whenever you load a plug-in you create a separate application domain.
You want to specify a list of directories that are searched for private assemblies.
You are required to add the application's base directory as part of your search and need to configure an application domain to meet the requirements.

A. The AppDomainSetup.PrivateBinPathProbe property should be used.
B. The AppDomain.BaseDirectory property should be used.
C. The AppDomain.DynamicDirectory property should be used.
D. The AppDomainSetup.PrivateBinPath property should be used.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The method used in the answer is used to specify a list of directories under the application's base directory that are probed for private assemblies. This property must be set to specify the locations that should be searched.
Incorrect Answers:
A: This property is set to a non-empty value and excludes the ApplicationBase from the searches and should not be used.
B: This method only specifies the base directory for the application domain and does not specify all the different locations to be searched for private assemblies.
C: This property is used to get the directory that the assembly resolver uses to probe for dynamically created assemblies and is a read-only assembly.

QUESTION 42
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application class library and decide to use the AppDomainSetup class to create an application domain.
You are required to create an instance of a type named BillSpace.BillType.
You are additionally required to configure the new application domain so that it probes for the assembly containing the type in a specified directory.
What should you do?

A. The ApplicationBase property of the AppDomainSetup class should be used.
B. The ActivationArguments property of the AppDomainSetup class should be used.
C. The CachePath property of the AppDomainSetup class should be used.
D. The AppDomainInitializerArguments property of the AppDomainSetup class should be used.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: It is possible to provide the common language runtime with configuration information for a new application domain using the AppDomainSetup class. The most important property is the ApplicationBase when creating your own

application domains which is used to define the root directory of the application.

Incorrect Answers:
B: This method is incorrect and should not be used because it sets or gets data about activation of an application domain.
C: This method is incorrect and should not be used because it sets or gets the name of an area specific to the application where files are shadow copied.
D: This method is incorrect and should not be used because it sets or gets AppDomainInitializer delegate which represents a callback method.

QUESTION 43
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a Windows Forms application. You are required to create a new class that raises a large number of events and keep memory usage of the class as low as possible.
This task must be accomplished using the minimum amount of code possible.
What should you do?

A. One instance of the EventHandlerList class should be used to store the delegate defined for each event in the class
B. One instance of the EventInstance class should be used for each event in the class
C. The EventBuilder class should be used to define the events for the class
D. One member variable per event delegate should be created per event delegate instance in the class

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The best option in this scenario would be to make use of the EventHandlerList class since the number of events is large and this method provides a memory efficient mechanism for storing a list of delegates.
Incorrect Answers:
B: This method is used for representing information for an event log entry.
C: This method is used for defining events for a dynamically generated class and in the scenario the class is not dynamically generated.
D: This method should not be used as it is not a memory efficient solution which is what is required of you.

QUESTION 44
You work as the application developer at Certkiller .com.
You are developing a .NET Framework 2.0 Windows Service application named TestScannerSync that will be used to constantly monitor for a scanner to be connected to the computer.
The TestScannerSync class inherits its functionality from the ServiceBase class.
When you connect a scanner the service synchronizes its data with the data in a SQL Server database.
You decide to override the OnStop method in the TestScannerSync class and write code to close database connections.
You are required to identify a place in the code where you can open the connection to the database.
What should you do?

A. The database connection is opened in the constructor of TestScannerSync class
B. The database connection is opened in the OnContinue method of TestScannerSync class
C. The database connection is opened in the OnStart method of the TestScannerSync class
D. The database connection is opened in the OnPowerEvent method of the TestScannerSync class

Answer: C
Section: (none)

Explanation/Reference:
Explanation: The constructor for a service class derived from ServcieBase is called the first time you call Start on the service, the OnStart command-handling method is called immediately after the constructor executes.
Incorrect Answers:
A: The constructor is the incorrect choice as this is only called upon once and not again.
B: This method should not be used as this code will be executed when a Continue command is sent to a service in a paused state.
D: This method should not be considered as this method will execute when the computer's power state has changed.

QUESTION 45
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing an application that will be used to connect and control the behavior of existing services installed on a network server named Certkiller -SR01.
What should you do?

A. Use the MachineName and ServiceName properties of the ServiceController class.
B. Use the Site property of the ServiceController class.
C. Use the Site property of the ServiceInstaller class.
D. Use the ServiceName and DisplayName properties of the ServiceInstaller class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The proper way to connect and control the behavior of existing services is by using the ServiceController class after which you are required to set two properties on it to identify the service to interact with. The MachineName property is used to define the computer Certkiller -SR01.
Incorrect Answers:
B, C: The Site property of the ServiceController and ServiceInstaller class should not be used because they bind a component to a container and enables communication between them.
D: This property should not be used as it is meant to specify the name of the service at the time of installation. The DisplayName property is used to specify the friendly name of the service at the time of installation.

QUESTION 46
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a Windows Service application that consists of two Services.
The first service monitors a directory for new orders while the other service replicates a database table with up-to-date information.
You are required to develop a project installer class to install these services.
What should you do? (Choose two)

A. One ServiceProcessInstaller instance must be Instantiate and add it to the project installer class
B. Two ServiceInstaller instances must be Instantiate and add them to the project installer class
C. Two ServiceProcessInstaller instances must be Instantiate and add them to the project installer class
D. One ComponentInstaller instance must be Instantiate and add them to the project installer class
E. Two ComponentInstaller instances must be Instantiate and add them to the project installer class
F. One ServiceInstaller instance must be Instantiate and add them to the project installer Class

Answer: AB
Section: (none)

Explanation/Reference:
Explanation: The proper way to do what the scenario requires of you would be to create one ServiceProcessInstaller instance per service application and one ServiceInstaller instance for each service in the application which have to be Instantiate.
Incorrect Answers:
C, F: You must create one ServiceProcessInstaller instance per service application and one ServiceInstaller instance for each service in the application which have to be Instantiate.
D, E: The ComponentInstaller class should not be considered for use as this class is an abstract class that can not be Instantiate.

QUESTION 47
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a Windows Service application. You need to change the security context in which the service runs.
The service will be run in context of a non-privileged user on the local computer and present anonymous credentials to any remote server.
You are required to set the Account property of the ServiceProcessInstaller class to specify the service account.
What should you do?

A. Use ServiceAccount.User.
B. Use ServiceAccount.LocalService.
C. Use ServiceAccount.LocalSystem.
D. Use ServceAccount.NetworkService.

Answer: B
Section: (none)

Explanation/Reference:
Explanation: The proper way to complete the operation is to use the ServiceAccount.LocalService as the value of the Account property of the ServiceProcessInstaller class, setting this value will run the service in context of the non-privileged user on the local computer.
Incorrect Answers:
A: This method should not be used as you will be specifying the service to run in the security context of a specified user account.
C: This method should not be considered as you will run the service in the security context of a highly privileged user account.
D: The scenario requires the service to run in the security context of a non-privileged user on the local system not the network.

QUESTION 48
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a Windows Service application which contains three different Windows services.
You are required to only set one Windows service to start automatically when the system is restarted.
What should you do?

A. Use the ServiceController class.
B. Use the ServiceBase class.
C. Use the ServiceProcessInstaller class.
D. Use the ServiceInstaller class.

Answer: D

Section: (none)

Explanation/Reference:
Explanation: The proper and best way to achieve the scenario would be to use the ServiceInstaller class, the StartType property of the ServiceInstaller class allows you to specify how and when a service is started.
Incorrect Answers:
A: This method used here is incorrect as it can not be used to specify the start type of a Windows service.
B: This method is the base type for all Windows services but does not allow you to specify the start type for a Windows service.
C: This class should not be used because it has a method that affects all services in an executable.

QUESTION 49
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows Service application and are busy writing the following installation code for the Windows service:

<RunInstallerAttribute(True)> Public Class TestServiceInstaller Implemets Installer
'Additional code to go here
End Class

You are required to install the Windows service and write the values associated with the service in the Windows Registry.
What should you do?

A. The Assembly Registration Tool (Regasm.exe) should be used.
B. The Global Assembly Cache Tool (Gacutil.exe) should be used.
C. The .NET Services Installation Tool (Regsvcs.exe) should be used.
D. The Installer Tool (InstallUtil.exe) should be used.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The InstallUtil.exe utility is the correct toll that should be used because it will install the classes in the specified assembly that derive from the installer class and have the RunInstallArttribute attribute set to True.
Incorrect Answers:
A: This tool should not be used in the scenario as this tool registers .Net assemblies so that COM clients can access .NET classes.
B: This tool should not be used as it is used to install and uninstall assemblies from the global assembly cache.
C: This tool should not be considered for usage as the tool is used for installing classes for Enterprise Services.

QUESTION 50
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows service application that is used to perform several short tasks that require background processing.
You are not required to actively manage threads in your application but you are required to ensure that security checks are performed during the execution of the task.
What should you do?

A. Use ThreadPool.queueUserWorkItem.
B. Use ThreadPool.UnsafeQueueUserWorkItem.
C. Use Thread.Resume.

D. Use Thread.Start.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The scenario requires several short tasks to be run which requires background processing. Using the ThreadPool class is ideal in this situation as the system manages the thread pool meaning you have less overhead involved.
Incorrect Answers:
B: This method should not be considered for use as the security check the scenario requires will not be performed.
C, D: This method should not be considered because the Thread class is useful for creating threads that run in the foreground that are actively managed.

QUESTION 51
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows application and need to create a foreground thread to draw lines in your application.
When the thread is started you must provide a data value that specifies the number of lines drawn.
What should you do? (Choose two)

A. A WaitCallBack delegate should be created
B. A ThreadStart delegate should be created
C. A ParameterizedThreadStart delegate should be created
D. The ThreadStart method should be called
E. The ThreadPool.QueueUserWorkItem method should be called

Answer: CD
Section: (none)

Explanation/Reference:
Explanation: The first order of operations would be to create a ParameterizedThreadStart delegate then use the ThreadStart method to start the thread. The ThreadStart method can be used to create actively managed foreground threads. The Parameterized ThreadStart delegate allows the passing of data when starting a thread.
Incorrect Answers:
A: This method should not be used as this method is for executing in a background thread that is part od a thread pool.
B: The ThreadStart delegate should not be used because you first need to pass parameters when starting a thread.
E: The method in this option should not be used because this method is used to create system managed background threads.

QUESTION 52
You are developing a .NET Framework 2.0 Windows Forms application on Certkiller -WS554.
The application must provide support for multiple languages and regional differences.
You are required to define a custom culture based on an existing culture and region.
An administrative user will install the custom culture on the end user's computer prior to the applications deployment
and you are required to select which class to use.
What should you do?

A. The CultureAndRegionInfoBuilder class should be used

B. The CustomAttributeBuilder class should be used
C. The RegioInfo class should be used
D. The CultureInfo class should be used

Answer: A
Section: (none)

Explanation/Reference:
The correct option in the scenario would be to make use of the CultureAndRegionInfoBuilder class as this class is used to define a custom culture that is new or based upon an existing region and culture.

Incorrect Answers:
B: This class should not be used in the scenario because this class is used to define custom attributes which are used to associate declarative information.
C: This class should not be used in the scenario because this class is used to access the region data for an already installed culture.
D: This class should not be used in the scenario because this class can only be used to make use of cultures that have already been installed.

· CultureAndRegionInfoBuilder

QUESTION 53
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You have recently finished development of a class named TestReward and package the class in a .NET 2.0 assembly named TestObj.dll.
After you ship the assembly and it is used by client applications, you decide to move the TestReward class from TestObj.dll assembly to the TestRewardObj.dll Assembly. You are to ensure when you ship the updated TestObj.dll and TestRewardObj.dll assemblies that the client
applications continue to work and do not require recompiling.
What should you do?

A. The TypeForwardedTo attribute should be used
B. The TypeConvertor.ConvertTo method should be used
C. The InternalsVisibleTo attribute should be used
D. The Type Convertor.ConvertFrom method should be used

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The statement used for you to add a type from one assembly into another assembly is the TypeForwardTo attribute which enables you not to have the application recompiled.

Incorrect Answers:
B, D: The TypeConverter class provides a unified way of converting different types of values to other types and can not be used to move a type.
C: The method in question here specifies all nonpublic types in an assembly are visible to other assemblies but can not be used to move types.

QUESTION 54
Certkiller .com has been hired by a small local private school to develop a class library that will be used in an application named ManageAttendance for the purpose of managing student records.
You are responsible for developing this class library. Certkiller .com has instructed you to create a collection in

the application to store learners' results.
The school has informed you that they currently only have seven learners, but that this value will triple in the following year.
Due to the limited resources, you need to ensure that the collection you create consumes a minimum amount of resources.
What should you use to create the collection?

A. The HybridDictionary collection class.
B. The HashTable collection class.
C. The ListDictionary collection class.
D. The StringCollection collection class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: You should use the HybridDictionary class to create the collection because this class is useful in scenarios where the number of elements is unknown or could grow in size. A collection of the HybridDictionary type manages the collection depending on the number of elements. The HybridDictionary type collection uses the ListDictionary class to manage the collection when there are only a few elements. When the number of elements exceeds ten, the HybridDictionary type collection automatically converts the elements into HashTable management.

Incorrect Answers:
B: You should not use this collection class because this class is used if the total number of elements to be stored in a collection is known and is greater than ten elements in length.
C: You should not use this collection class because this class is used if the total number of elements to be stored in a collection is known and is less than ten elements in length.
D: You should not use this collection class because this class is used to manage a collection of string values.

· Wie die Frage wenig aber später vielleicht mehr - Hybrid.

QUESTION 55
You are creating a class that uses unmanaged resources.
This class maintains references to managed resources on other objects.
You need to ensure that users of this class can explicitly release resources when the class instance ceases to be needed.
Which three actions should you perform?
(Each correct answer presents part of the solution. Choose three.)

A. Define the class such that it inherits from the WeakReference class.
B. Define the class such that it implements the IDisposable interface.
C. Create a class destructor that calls methods on other objects to release the managed resources.
D. Create a class destructor that releases the unmanaged resources.
E. Create a Dispose method that calls System.GC.Collect to force garbage collection.
F. Create a Dispose method that releases unmanaged resources and calls methods on other objects to release the managed resources.

Answer: BDF
Section: (none)

Explanation/Reference:
Explanation:
It is necessary to implement the IDisposable interface if you need to release unmanaged resources or

want explicit control of the life of managed resources. A class destructor should be created to release the unmanaged resources and this should be called from within the Dispose method. The dispose method should also release the managed resources.

Inheriting from WeakReference would result in the garbage collector releasing resources even though there may be valid references.

The managed resources should be released in the Dispose method.

System.GC.Collect could be used, however it is more efficient to manually release the managed resources. The GC incurs overhead and may have only recently been called anyway. The question states resources should be released explicitly.

· D statt C - da im Destruktor die Dispose-Methode aufgerufen wird, und dadurch indirekt die unmanaged resources freigegeben werden.

Exam C

QUESTION 1
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows Service application that will be used on a multiprocessor system.
You are writing code for a class that contains globally accessible Integer variable named Testcounter.
The value of the Testcounter will be incremented of decremented from other classes running in separate threads.
You are required to provide atomic and non-blocking updates for the Testcounter whilst your solution provides the best performance.
What should you do?

A. The Interlocked class should be used
B. The Overlapped class should be used
C. The SynchronizationContext class should be used
D. The SyncLock statement should be used

Answer: A
Section: (none)

Explanation/Reference:
Explanation: For this particular scenario the Interlocked class is ideal because you are required to provide atomic and non-blocking updates for a data item.
Incorrect Answers:
B: This option should not be used in the scenario because it is used to transfer information to Win32 API functions.
C: This operation should not be used as you will not be providing atomic and non-blocking updates.
D: This option should not be used as it does not offer atomic operations and offers inferior performance compared to the Interlocked class.

QUESTION 2
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows Service application. You are required to synchronize execution of some resources across multiple processes.
What should you do?

A. Use the Mutex class.
B. Use the Interlocked class.
C. Use the Monitor class.
D. Use the ReaderWriterLock class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The Mutex class can be used for the synchronization of thread execution across multiple processes.
Incorrect Answers:
B, C, D: The classes in question in these options can not be used in the scenario because they can only be used within a single process.

QUESTION 3
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application that uses the CreateDomain method of the AppDomain class to create an application domain.
You are required to set the following properties for the new application domain:
* Root directory
* Location of the configuration file
* Search path that the Common Language Runtime uses to load the assemblies into the domain
You must ensure that these properties values are passed to the CreateDomain method.
What should you do?

A. Pass an AppDomainFactory object as a parameter to the CreateDomain method.
B. Pass an AppDomainIsolatedTask object as a parameter to the CreateDomain method.
C. Pass an AppDomainHelper object as a parameter to the CreateDomain method.
D. Pass an AppDomainSetup object as a parameter to the CreateDomain method.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The correct method for achieving your scenario objective is to pass an AppDomainSetup object as parameter to the CreateDomain method. The AppDomainSetup object is used to allow you to specify the root directory and required.
Incorrect Answers:
A: This method is used to create a new AppDomain instance for the Web applications and can not be used to specify setup information for an application domain.
B: The method in question here can be used to create build tasks that can be instantiated in their own application domain but can not be used to specify setup information.
C: This method should not be used in the scenario as it switches into the given application domain and does a callback on the given function and can not be used to specify setup information.

QUESTION 4
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 system utility application and are required to write some code that allows you to examine assemblies compiled for other platforms of the .NET Framework. You create a new application domain and load assemblies into it.
You are required to ensure that code loaded into this context can be examined but not executed.
You know the path name of the file containing the assembly but you do not know the name of the assembly.
What should you do?

A. The Assembly.ReflectionOnlyLoadFrom method should be used.
B. The Assembly.LoadFrom method should be used.
C. The Assembly.ReflectionOnlyLoad method should be used.
D. The Assembly.Load method should have been used.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The correct method for what is required would be to use the reflection-only load context because this allows you to only examine the assembly and not execute it.

Incorrect Answers:

B, D: These methods should not be considered for usage because the methods allow you to execute code and create objects.
C: The method in question should not be considered for usage when you only know the path name to where the assembly resides.

QUESTION 5
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Web application. You need to access the configuration data for the application.
You do not need read-only access to the configuration data whilst your solution provides the maximum performance.
What should you do?

A. The GetSection method of the Configuration class should be used
B. The GetSection method of the ConfigurationManager class should be used
C. The GetSectionGroup method of the Configuration class should be used
D. The GetSection method of the WebConfigurationManager class should be used

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The configuration class in question is designed to programmatically access configuration information for Web applications. The GetSection static method retrieves the cached configuration information.
Incorrect Answers:
A: The method in question does allow programmatic access to all configuration files but it does not cache configuration values for the current application.
B: This should be avoided at all costs as it is best suited for retrieving information for Windows client applications.
C: This method is used to only retrieve specific section groups from the configuration object similar to the GetSection method.

QUESTION 6
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Web application and are busy creating a Configuration object in your application that inherits
settings from the applications' web.config file and machine.config file.
You modify several of the Configuration objects settings and want to save the Configuration object to a file named testconf.config.
You require only the values that differ from the inherited values to be written to the configuration file.
What should you do? (Choose two)

A. The Save method on the Configuration object should be called
B. The ConfigurationSaveMode.Full value must be passed as a parameter
C. The ConfigurationSaveMode.Modified value must be passed as a parameter
D. The SaveAs method on the Configuration object should be called
E. The ConfigurationSaveMode.Minimal value should be passed as a parameter

Answer: CD
Section: (none)

Explanation/Reference:

Explanation: When you are required to write configuration settings to a different file the SaveAs method should be called. If you wish to write only values which differ from inherited values the ConfigurationSaveMode.Minimal value should be passed as a parameter.
Incorrect Answers:
A: This method is used to have the SaveAs method to save all the values to the configuration file that you specified in the scenario.
B: This method is used to have the SaveAs method to only the modified values to the configuration file that you specified in the scenario.

QUESTION 7
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are in the process of maintaining a .NET Framework 1.0 Windows application and need to configure the application to run using the .NET Framework 1.1.
The network computers of Certkiller .com all have three versions of .NET Framework (version 1.0, 1.1, and 2.0 installed side-by-side.
You are required to modify the application configuration file to target the .NET Framework 1.1 runtime.
What should you do?

A. <configuration>
<startup>
<supportedRuntime version="v2.0.50727"/>
<supportedRuntime version="v1.1.4322"/>
<supportedRuntime version="v1.0.3705"/>
</startup>
</configuration>

B. <configuration>
<startup>
<supportedRuntime version="v1.1.4322"/>
<supportedRuntime version="v1.0.3705"/>
</startup>
</configuration>

C. <configuration>
<startup>
<requiredRuntime version="v1.1.4322"/>
</startup>
</configuration>

D. <configuration>
<startup>
<supportedRuntime version="v1.1.4322"/>
</startup>
</configuration>

Answer: D
Section: (none)

Explanation/Reference:
Explanation:
To have your applications run under the required runtime in the scenario you should use the configuration section provided in the answer, this is the only correct method.
Incorrect Answers:
A: The method you are trying to use hear is incorrect as you would be executing against .NET Framework v2.0.
B: The method you are trying to use hear is incorrect as you would be executing against .NET Framework v1.1.
C: This method is used to indicate that the application only supports .Net Framework v1.0 and should not be used in the scenario.

QUESTION 8
C: The path here is incorrect since you only need point to the Test20 path in the scenario. You work as the application developer at Certkiller .com.
Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application and are busy developing the shared assembly called BillSharedObjects which resides in a file
named BillSharedObjects.dll, upon compiling you store the assembly in the C:\BillSharedObjects\Debug directory.
You do not want the assembly to be repeatedly installed in the global assembly cache while you develop and debug.
You want the application to load the assembly from its current location by .Net Framework when testing whilst any changes made to the system not affect
any other applications that are deployed or will be deployed.
What should you do? (Choose two)

A. C:\SharedObjects\Debug must be put in the PATHEXT environment variable
B. C:\SharedObjects\Debug must be put in the PATH environment variable
C. C:\SharedObjects\Debug must be put in the DEVPATH environment variable
D. The following code should be added to the application configuration file:
<configuration>
<runtime>
<assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1"> <probing privatePath="c:\SharedObjects \Debug"/>
</assemblyBinding>
</runtime>
</conmfiguration>
E. The following code should be added to the machine configuration file:
<configuration>
<runtime>
<assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1"> <dependantAssembly>
<assemblyIdentity name="BillSharedObjects"
publicKeyToken="12ac3ab67e0a34b5"
culture="en-us"/>
<codeBase version="2.0.0.0"
href="BillSharedObjects\Debug"/>
</dependantAssembly>
</assemblyBinding>
</runtime>
</configuration>
F. The following code should be added to the machine configuration file:
<configuration>
<runtime>
<developmentMode developerInstallation="true"/>
</runtime>
</configuration>

Answer: F
Section: (none)

Explanation/Reference:
Explanation:
In order for you to achieve the scenario objective you must use the <developmentMode> element and set the developerInstallation attribute to "true" this will let .NET Framework search for assemblies in the DEVPATH environment variable.
Incorrect Answers:
A, B: This method is incorrect as these environment variables are used by Windows and are not used by .NET

Framework.
D, E: The usage of the <codeBase> and <probing> elements are incorrect as the one is useful for specifying the search path for private assemblies and the other will affect settings of applications that are already deployed.

QUESTION 9
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows service application that has three distinct Windows services. You create a custom installation class named

BillAppInstaller which derives from the Installer class.
Within the class you decide to customize installation for each Windows service by using the ServiceInstaller objects and add them to the installer collection below:

Installers.Add(serviceInstaller1)
Installers.Add(serviceInstaller2)
Installers.Add(serviceInstaller3)

You later compile the class and store in a file named BillAppInstaller.dll. You are required to programmatically access and install the Windows services in the BillAppInstaller.dll file.
What should you do?

A. Use the ManagedInstallerClass class.
B. Use the ComponentInstaller class.
C. Use the InstallContext class.
D. Use the AssemblyInstaller class.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The AssemblyInstaller class should be used in the scenario because the AssemblyInstaller class is capable of loading available installers in an assembly and install them.
Incorrect Answers:
A: This class should not be used in the scenario as this is not for the .NET Framework internal use.
B: This method is used to install components such as event logs and performance counters and should not be used in the scenario.
C: This class should not be used because by itself the class can not help install the installers in an assembly.

QUESTION 10
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Remoting application with the name of your class BillType and the name of the assembly TestAssembly which will be accessed using the Transmission Control Protocol (TCP) at port 1234.
You are required to expose BillType as a server-activated object for remote access whilst you must use a configuration file to register the remote object.
What should you do?

A. <configuration>
<system.runtime.remoting>
<application>
<service>
<activated type = "BillType, TestAssembly"/>
</service>
</application>
</system.runtime.remoting>
</configuration>

B. <configuration>
<system.runtime.remoting>
<application>
<client url="tcp://localhost:1234/BillType.rem">
<activated type ="BillType, TestAssembly"/>
</client>
</application>
</system.runtime.remoting>
</configuration>

C. <configuration>
<system.runtime.remoting>
<application>
<service>
<wellknown mode = "Singleton"
type ="BillType, TestAssembly"objectUri="BillType.rem"/>
</service>
</application>
</system.runtime.remoting>
</configuration>

D. <configuration>
<system.runtime.remoting>
<application>
<client>
<wellknown type="BillType, TestAssembly"url="tcp://localhost:1234/BillType.rem"/>
</client>
</application>
</system.runtime.remoting>
</configuration>

Answer: C
Section: (none)

Explanation/Reference:
Explanation: In order to successfully set up an object for remote access the configuration used in the answer is the proper method if you want the object to be activated as a server object.
Incorrect Answers:
A, B, D: The usage of the <client> element is incorrect as this will be used to configure a program that will consume the remote object and in the scenario you must expose an object for remote access.

QUESTION 11
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application for Certkiller .com.
You complete the application but as soon as Certkiller .com users attempt to log on to the application the application fails.
You need to have an entry written to the Windows event log. When you look at the event log viewer you want the source of the events to be listed as TestApp.

You are required to create an event source that can be used to write entries to the event log.
What should you do?

A. If Not EventLog.SourceExists("TestApp") Then
 EventLog.CreateEventSource("TestApp", "Application")
 End If
B. EventLog.LogNameFromSourceName("TestApp", "Application")
C. EventLog.LogNameFromSourceName("TestApp", "Security")
D. If Not EventLog.SourceExists("TestApp") Then
 EventLog.CreateEventSource("TestApp", "Security")
 End If

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The code that is used in the answer is the proper code that should be used to create entries into the Application event log.
Incorrect Answers:
B, C, D: The other methods that are used are not correct because the security log is read-only and furthermore the LogNameSourceName method returns the name of an event log for the given event and does not help in creating an event source.

QUESTION 12
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows application named TestAnalyzer.exe that will be used to monitor the Application event log of the local computer to find if any new events are generated by another application named BillNotify.exe which runs on the local computer named Certkiller -WS11.
Whenever a new event log entry is recorded the application must invoke the applicationLog_EntryWritten method in response.
You write the code below for the notification of new event log entries:

```
Dim applicationLog As EventLog = New EventLog("Application", ".")
AddHandler applicationLog.EntryWritten,
AddressOf
applicationLog_EntryWritten
```

When you test the application you discover that there are no notifications generated. You are required to ensure that you are notified of a new event log entries.
What should you do?

A. The applicationLog.EnableRaisingEvents property must be set to True
B. The applicationLog.Log property must be set to BillNotify.exe
C. The applicatioLogMachineName property must be set to Certkiller -WS11
D. The applicationLog EnableRaisingEvents property must be set to False

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The EnableRaisingEvents property of the applicationLog object must be set to true if you want to be notified whenever new entries have been written to the specified event log.

Incorrect Answers:

B: This method is incorrect as the Log property should be used to specify the name of the event log.
C: This is incorrect as this is a redundant operation and the EventLog object is already pointing to Certkiller - WS11.
D: This step is almost what you require but the property of the EnableRaisingEvents should be set to True.

QUESTION 13
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application that will be used for publishing its own custom performance counter.
You additionally require the value of a performance counter to increase by 5 and must minimize the amount of code needed to write.
What should you do?

A. Use the NextValue method.
B. Use the Decrement method.
C. Use the Increment method.
D. Use the IncrementBy method.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: To have the value of a counter decreased by the desired amount the best choice of method requiring the least amount of code would be the IncrementBy method.
Incorrect Answers:
A: This is the code used to return the value of the counter and should not be used in the scenario.
B: The method is used if you want to have the value decreased and in the scenario an increase is needed.
C: This method is used to only increase the value of the counter by one and should not be used.

QUESTION 14
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows application that provides a user interface similar to Microsoft Excel and allows users to manage their expenses.
You recently wrote a wrapper around the expense management application which performs security checks.
If the users have the sufficient rights the wrapper application launches the expense management application, if no sufficient rights the application should be forced to close.
You must decide which method of the Process class to use.
What should you do?

A. Use the Kill method.
B. Use the Close method.
C. Use the Dispose method.
D. Use the CloseMainWindows method.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: To successfully have an application forcefully close or shutdown the Kill method should be used as it forces an immediate termination of the process.
Incorrect Answers:
B: This method should not be used as the Close method is used to free resources associated with the

application process.
C: This method should not be used in the scenario as it is generally used to implement cleaning of unmanaged resources.

D: This method should not be used as this method requests that the application be closed and we require closing the application forcefully.

QUESTION 15
You work as an application developer at Certkiller .com. You have just completed

the creation of an application that receives order data from Certkiller .com's partner company in XML format. The XML has to be utilized to create an Order object that is consumed by the new application.
The following exhibit displays an example of Certkiller .com's partner company's XML data:

```
<?xml version="1.0" encoding="utf-8"?>
<Order id="101">
  <Shipping>
    <Instructions>
      Come to front door and ring door bell.
     No other options.
    </Instructions>
   <Address>
     <Street>536 Certkiller Lane</Street>
     <City>Miami</City>
     <State>FL</State>
     <Zip>70536</Zip>
   </Address>
  </Shipping>
 <Date>2006-07-12T00:00:00-04:00</Date>
  <Details>
  <SalesProduct InStock="true" Taxable="true">
    <Name>Lounge Suite</Name>
    <Quantity>1</Quantity>
    <Price>200.00</Price>
  </SalesProduct>
  <Product InStock="false">
    <Name>Plasma Television</Name>
    <Quantity>2</Quantity>
    <Price>26.999.00</Price>
   </Product>
  </Details>
</Order>
```

You plan to use the XmlSerializer class to deserialize the XML data into an Order object.
When you learn that Certkiller .com's partner company's XML also contains Shipping object data, you decide to deserialize the shipping object after the Shipping element is detected during deserialization.
To achieve this, you need to use a certain event of the XmlSerializer class.
What event should you use?

A. UnknownElement
B. UnknownNode
C. UnreferencedObject
D. UnknownAttribute

Answer: B
Section: (none)

Explanation/Reference:
Explanation: The UnknownNode event is fired when an unexpected element or node is detected that does not map to the XmlSerializer object's expected type. The UnknownNode event included the XmlNodeEventArgs, which allows access to the entire node of the XML data. This would allow easy deserialization for the Shipping object.

Incorrect Answers:
A, C, D: These options would not allow easy deserialization for the Shipping object.

QUESTION 16
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 remoting application. Your computer system relies on run-time type validation.
You are required to deserialize a remote stream by using the BinaryFormatter class in your application whilst you configure the BinaryFormatter object
to protect against any deserialization attacks by deserializing only certain types associated with only the most basic remoting functionality.
What should you do?

A. The TypeFormat property should be set to FormatterTypeStyle.TypesAlways
B. The TypeFormat property should be set to FormatterTypeStyle.TypesWhenNeeded
C. The FilterLevel property should be set to TypeFilterLevel.Full
D. The FilterLevel property must be set to TypeFilterLevel.Low

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The best choice for you in the scenario would be to use the FilterLevel property of the BinaryFormatter object set to TypeFilter.Low which deserializes only the most basic remoting functionality helping to protect against deserialization attacks.

Incorrect Answers:
A, B: The setting can not be used to set the deserialization of types because it just configures how the types are laid out in the deseriliazation stream.
C: This setting should no be used as you will be deserializing all types and this offers no protection against deserialization attacks in the scenario.

QUESTION 17
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 geographical information system for the company and create a class named Certkiller Code.
You are required to serialize all public and non-public data of the Certkiller Code class whilst you ensure that you produce the smallest byte stream
so that the smallest load is placed upon network resources.
What should you do?

A. The XmlSerializationWriter class should be used
B. The XmlSerializer class should be used
C. The BinaryFormatter class should be used
D. The SoapFormatter class should be used

Answer: C
Section: (none)

Explanation/Reference:
Explanation: To successfully serialize all the public and non-public data you should make use of the BinaryFormatter class because in addition the BinaryFormatter class produces the most compact byte stream compared to other serialization classes.

Incorrect Answers:
A, B: The XmlSerializer class should not be used as this class only serializes public properties and fields and the XmlSerializationWriter class is used to controls serialization by using the XmkSerialization class and fails to meet requirements.
D: The SoapFormatter class could be used as it will allow you to serialize public and non-public data but the result of the stream will be a verbose and will consume more network resources.

QUESTION 18
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 financial application and are busy developing a module that backs up the critical data on a separate hard drive.
You are required to decide which properties of the DriveInfo class to use and find the type of file system like FAT or NTFS and the drive free space and
the user disk quota should be ignored by the application.
What should you do?

A. Use the DriveFormat and TotalFreeSpace properties of the DriveInfo class.
B. Use the DriveType and AvailableFreeSpace properties of the DriveInfo class.
C. Use the VolumeLabel and TotalSize properties of the DriveInfo class.
D. Use the DriveType and TotalSize properties of the DriveInfo class.
E. Use the DriveFormat and AvailableFreeSpace properties of the DriveInfo class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The only choice that would work with your requirement is the DriveFormat and TotalFreeSpace properties of the DriveInfo class; this will display what you need.
Incorrect Answers:
B: The DriveType property should not be used as it only specifies whether the drive is a DVD ROM or fixed drive etc. The AvailableFreeSpace property should also not be used as the user disk quota would be taken into account.
C: The VolumeLabel property should not be used in the scenario as it is used to give a name to the fixed disk. The TotalSize property should also not be used as it will specify the entire disk space not just free space.
D: The DriveType property should not be used as it only specifies whether the drive is a DVD ROM or fixed drive etc.
E: The AvailableFreeSpace property should not be used as the user disk quota would be taken into account.

QUESTION 19
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 data analysis application.
You have no information about the inherent structure of a file when it is supplied to the program for reading data.
You are required to read the contents of the file byte-by-byte and make use of a custom algorithm to find its format whilst selecting a class

that allows you to read the files contents byte-by-byte.
What should you do?

A. Use the FileStream class.
B. Use the BinaryReader class.
C. Use the StreamReader class.
D. Use the StringReader class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The purpose and function of the FileStream class is to allow the user to be able to view the required files byte-by-byte.
Incorrect Answers:
B: The BinaryReader class is use full if you know the binary format for the data to read but should not be considered for use in the scenario.
C: This method is use full if you want to read character data in a particular encoding, but is not useful for reading any other data.

D: This class is used for reading text from a string and is not use full for reading any other data.

QUESTION 20
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 text-processing application. You have access to an array of bytes named ckArray that contains your data.
You are busy writing code that will be used to write the contents of the array to a disk file.
If you are done with the write operation you also display the contents of the stream on the console to make sure that the write operation completes successfully.
The code segment to read and write from the stream is shown below and the line numbers are reference only:

```
01: Using fStream As FileStream = New FileStream("ckFile.txt", FileMode.Create)
02: For i As Integer = 0 To ckArray.Length
03: fStream.WriteByte(ckArray(i))
04: Next i
05: 'Add code segment here
06: For i As Integer = 0 To fStream.Length
07: Console.WriteLine(fStream.ReadByte())
08: Next i
09: End Using
```

You add the appropriate code at line 05 to correctly print the contents of the stream.
What segment should you add?

A. fStream.Seek(0, SeekOrigin.End)
B. fStream.Position = fStream.Length
C. fStream.Seek(0, SeekOrigin.Current)
D. fStream.Seek(0, SeekOrigin.Begin)

Answer: D
Section: (none)

Explanation/Reference:
Explanation: Because after every write operation is completed you need to reposition the stream so that you can

read the contents from the beginning which is done with the statement in the answer, the first parameter will specify the offset, the second the reference point for the seek operation and the value SeekOrigin.Begin indicates that the reader should be positioned at the beginning of the stream.

Incorrect Answers:
A, C: The method in the statement is incorrect because you are referencing the end or the current part of the stream which you are trying to manipulate.
B: This statement should not be used because it sets the current position of the stream to its length effectively referencing the end of the stream.

QUESTION 21
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 banking Windows Forms application and are busy working on a function that retrieves the images of cancelled checks and displays them on the from. You currently have access to a method that reads the images from Microsoft SQL server as a series of bytes.
You are required to select a class that allows you to transfer the image from SQL Server to the Windows Forms application whilst your solution reduces the need of a temporary buffers and files
What should you do?

A. Use the MemoryStream class.
B. Use the NetworkStream class.
C. Use the FileStream class.
D. Use the BufferedStream class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: With the given scenario objective you should use the MemoryStream class which allows you to read the image data in memory and stream it to a Windows Forms application without creating any temporary buffers or files.
Incorrect Answers:
B: There is no connection established directly to the SQL Server database so using this option is out of the question.
C, D:
The streaming class in question in this option is incorrect because both require the creation of temporary files or buffers.

QUESTION 22
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 graphical analysis application.
You are about to save a graphical object from the application which is a collection of x and y points, each represented by using a single precision floating point number.
You are required to keep the disk space usage to a minimum by the saved object.
What should you do?

A. Use the TextWriter class.
B. Use the StreamWriter class.
C. Use the StringWriter class.
D. Use the BinaryWriter class.

Answer: D

Section: (none)

Explanation/Reference:
Explanation: The BinaryWriter class is used to store data in a binary format, which is used to provide the most compact format for storing data among the given classes.
Incorrect Answers:
A, B, C: The classes in question all save or store data in the text format, which will require more space than the binary format and therefore should not be used in the scenario.
Explanation: To successfully read the user's preferences you should make use of the IsolatedStorageFile. GetUserStoreForAssembly method should be used. The method retrieves assembly-specific and user-specific data from the isolated storage.
Incorrect Answers:
A: This method should not be used in the scenario as it is designed too retrieve isolated storage that is application domain and assembly specific. B, C: The settings in question should not be used because the methods are machine-scoped rather than user scoped.

QUESTION 23
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS554 as your development computer. You are developing a .NET Framework 2.0 application on Certkiller -WS554. You write the following code in the application line numbers are for reference only:

```
01: Public Function ProcCount() As Integer
02: Dim envPerm As EnvironmentPermission = _
03: New EnvironmentPermission( _
04: EnvironmentPermissionAccess.Read, _
05: "NUMBER_OF_PROCESSORS")
06: 'Add code segment here
07: Return Environment.ProcessorCount
08: End Function
```

The ProcCount method in the code will be used to return the number of processors on the computer running the code and the implementation of the method is completely transparent to the callers of the methods. You ensured that the ProcCount method has been granted permission to access environment variables and the callers to the code may not have permission to access the variables. The classes in the other assemblies are required to be able to successfully call the ProcCount method. You must add code at line 06 to override the security check whilst you ensure that any code you write does not affect the permissions that your code already has.
What code segment should you add?

A. envPerm.PermitOnly()
B. envPerm.Demand()
C. encPerm.Deny()
D. envPerm.Assert()

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The envPerm.Assert() method should be used in the scenario because the method allows your code and any code that you call to perform actions that your code has permissions to perform however the callers may not have permissions to perform.
Incorrect Answers:

A: The PermitOnly method should not be used in the scenario because it will result to the same action as calling Deny on all permissions other than the permission P and this will affect other permissions.
B: This method should not be considered for use in the scenario because the Demand method requires all the callers to have permissions to perform the specific action.
C: The Deny method should not be considered for usage in the scenario because the method will explicitly cause the Permission P to be denied and you are required to ensure permissions are applied to the code.

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QUESTION 24
You work as an application developer at Certkiller .com. A fellow developer named Amy Walsh recently created an assembly that implements a custom permission set.
Certkiller .com has asked you to test this assembly.
You start by copying the assembly to a test server named Certkiller -SR15 that has the Microsoft .NET 2.0 Framework installed.
You then log on to the Certkiller -SR15 as a member of the local Administrators Windows group.
You run the assembly, and receive a security exception.
You perform a brief analysis of the security issues involved, and find that the assembly has not been assigned the appropriate permissions to run.
You need to ensure that this assembly runs.
What should you do?

A. Use the permview.exe tool to modify the assembly's granted permissions.
B. Use the sn.exe tool to modify the assembly's granted permissions.
C. Use the caspol.exe tool to modify the assembly's granted permissions.
D. Use the gacutil.exe tool to modify the assembly's granted permissions.

Answer: C
Section: (none)

Explanation/Reference:
Explanation: The caspol.exe command-line tool allows users to modify security permissions, permission sets, and code groups for an assembly at the machine, user, and enterprise policy levels.
Incorrect Answers:
A: The permview.exe tool only allows users to view declarative security of an assembly.

B: The sn.exe tool allows developers to create a strong-named asymmetric key pair for strong-named assemblies.
D: The gacutil.exe tool allows users to manage the contents of the global assembly and download cache.

QUESTION 25
You work as an application developer at Certkiller .com.
Certkiller .com has a test server named Certkiller -SR09 that is frequently used by other Certkiller .com developers to test assemblies and applied security policies.
You have just completed creating an assembly and want to test it on Certkiller -SR09.
You need to ensure that all security policies on Certkiller -SR09 are reset to their default settings.
What should you do?

A. Run the caspol all -rollback command.
B. Run the caspol all -reset command.
C. Run the machine all -rollback command.
D. Run the machine all -reset command.

Answer: B
Section: (none)

Explanation/Reference:
Explanation: The caspol.exe command-line tool allows users to modify security permissions, permission sets, and code groups for an assembly at the machine, user, and enterprise policy levels. The reset switch will set the specified security policy or policies back to their default state. The all switch refers to machine, user, and enterprise policy levels.
Incorrect Answers:
A, C: The rollback switch does not exist for the caspol.exe tool.
D: This option will not set all security policies back to their default state.

QUESTION 26
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application and are about to examine the code groups in machine, user, and enterprise policies.
The user security policy file is located in c:\ Certkiller \config\ Certkiller Security.config and belongs to a user other than the currently logged on user.
You are required to use code access security policy tool to inspect the security policy and need the required command.
What should you do?

A. Run the caspol -customall -resolvegroup "c:\ Certkiller \config\ Certkiller Security.config" command.
B. Run the caspol -customer "c:\ Certkiller \config\ Certkiller Security.config" -listgroups command.
C. Run the caspol -customer -resolvegroup "c:\ Certkiller \config\ Certkiller Security.config" command.
D. Run the caspol -customall "c:\ Certkiller \config\ Certkiller Security.config" -listgroups command.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: Since the -customall option is used to specify that the command applies to the enterprise, machine and custom user policy stored in the
"c:\ Certkiller \config\ Certkiller Security.config file making this the correct option to use in the scenario. The -listgroup option is used to specify the code groups in the specified policies that need to be listed.
Incorrect Answers:
A, C: The usage of the -resolvegroup option in the scenario is incorrect because the -resolvegroup option is used to show the code groups that the specified user belongs to.
B: The option in question in this answer should not be used in the scenario because the option is used to specify only the code groups of the specified user policy.

QUESTION 27
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS536 as your development computer.
You are developing a .NET Framework 2.0 application on Certkiller -WS536. You create an assembly that implements a custom security object.
The assembly resides in the CKPerm.exe file. The CKPerm.exe references the classes in the BasePerm.exe assembly.
You are required to write a script that will be used to add the assembly to the full trust assembly list of the currently logged on user whilst the user
will never have write access to the machine policy file.
What should you do? (Choose two)

A. Run the caspol -addfulltrust CKPerm.exe command.
B. Run the caspol -addfulltrust BasePerm.exe command.
C. Run the caspol -enterprise -addfulltrust BasePerm.exe command.
D. Run the caspol -enterprise -addfulltrust CKPerm.exe command.
E. Run the caspol -machine -addfulltrust BasePerm.exe command.
F. Run the caspol -machine -addfulltrust CKPerm.exe command.

Answer: AB
Section: (none)

Explanation/Reference:
Explanation: The caspol.exe tool is used to allow you to modify the code access security policy at the user level, machine level as well as the enterprise level and using the -addfulltrust option adds an assembly that implements a custom security object to a list of fully trusted assemblies.
Incorrect Answers:
C, D, E, F: In the event that there is no policy level specified the caspol.exe tool checks

if the user has write permission to the machine policy file if so the machine level security policy will be used other wise the user-level policy will be used.

QUESTION 28
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS536 as your development computer.
You are developing a .NET Framework 2.0 application on a Certkiller -WS536.
You must add a new code group which adds FullTrust permissions to the code originating from www. Certkiller . com.
You are required to use the code access security policy tool (Caspol.exe to add the code group whilst you ensure that you only affect the user level policy for the
user running Caspol.exe
What should you do?

A. Run the caspol -user -addgroup -site www. Certkiller .com FullTrust command.
B. Run the caspol -user -addgroup -zone Internet command.
C. Run the caspol -user -addgroup -url www. Certkiller .com FullTrust command.
D. Run the caspol -user -addgroup -pub -cert test.cer FullTrust command.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The correct thing to do in the scenario would be to make use of the segment that used -user to specify only the user level policy, the -addgroup argument to add a new code group to the code hierarchy and the -site argument that targets code that originated only from www. Certkiller .com.
Incorrect Answers:
B: This method should not be used in the scenario because it is used to simply add a new code group that is a member of the Internet Zone.
C: This command should not be used in the scenario because it should be used to specify a complete url including the protocol like http:// etc.
D: The command should not be used in the scenario as the method does not specify a Web site and the -pub argument is used to identify the software publisher.

QUESTION 29

You work as an application developer at Certkiller .com.
Certkiller .com has been contracted by a local doctor's clinic to develop a client application using Microsoft .NET 2.0 that sends patient visit information to a remote server at the clinic's main office.
This data must be transmitted via a secure network stream because it contains patient protected health information (PHI). The data will be sent from a windows application client on the doctor's notebook computer to a windows service hosted on a remote server. Both of these applications employ a certificate store for network identification.
You need to create a secure data stream by adding certain classes to the client application.

What classes should you add? (Choose three)

A. The MD5CryptoServiceProvider class.
B. The X509Certificate class.
C. The NetworkStream class.
D. The SslStream class.
E. The TcpListener class.
F. The TcpClient class.

Answer: BDF
Section: (none)

Explanation/Reference:
Explanation: You should use the X509Certificateclass to store the server certificate and encrypt data, the SslStream
class to create a secure channel, and the TcpClient class to establish the connection with the server application.
Incorrect Answers:
A: Using this option would only hash the data using the MD5 algorithm.
C: Using this option would not necessarily create a secure channel.
E: This class is used by the server application.

QUESTION 30
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application that will be used for transmitting contents over the Internet.
You need to encrypt a data file before transmitting the file. The encryption is required to prevent any spoofing of the identity of the publisher of the data file.
You decide to sign the data using the publisher's private key. You encrypt the data with the publisher's public key as well.
The receiver of the file will use a private key that only he knows to decrypt the data and the receiver has access to the publisher's public key also.
The intended receiver of the file should be able to decrypt the encrypted file after it was received through the Internet transmission whilst the receiver should additionally be able to detect if the contents of the data file were tampered with.
What should you do?

A. The RSACryptoServiceProvider class should be used in the scenario
B. The RijndaeManaged class should be used in the scenario
C. The SHA1CryptoServiceProvider class should be used in the scenario
D. The SHA1Managed class should be used in the scenario

Answer: A
Section: (none)

Explanation/Reference:
Explanation: Since the RSACryptoServiceProvider class implements an asymmetric cryptography algorithm that makes use of a set of related keys to encrypt and decrypt data this class is the correct choice in the scenario.

Incorrect Answers:
B: This class should not be used in the scenario because the RijndaeManaged class implements a symmetric cryptography algorithm that uses a single shared secret key for encrypting and decrypting data.
C, D: The classes in these two options should not be used in the scenario because the classes both implement a hash algorithm that can be used to detect tampering but they can not be used to establish the identity of the data file's publisher.

QUESTION 31
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS554 as your development computer.

You are developing a .NET Framework 2.0 application on Certkiller -WS536. The application will be used to send data over the internet.
You are required to ensure that the sent data is not modified or tampered with during transmission, the secrecy of the data transmission is not considered important.
You recently decided to implement a hash value for the data by using a secret key and transmit the data along with the hash value.
The receiver of the data should be able to detect whether the data or the hash value has been modified whilst the receiver should have access to the secret key that was used for computing the hash value.
You must additionally ensure that a key sequence of 160 bits should be acceptable.
What should you do?

A. The DESCryptoServiceProvider class should be used to encode the data prior to transmission
B. The HMACMD5 class should be used to encode the data prior to transmission
C. The MACTripleDES class should be used to encode the data prior to transmission
D. The HMACSHA1 class should be used to encode the data prior to transmission

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The SHA1 has function is used by the HMACSHA1 class to compute a Has-based Message Authentication Code (HMAC) and additionally HMAC can be used to check if a message has been modified during the transmission.
Incorrect Answers:
A: The class should not be considered for use in the scenario because the class is used to encode the data to protect and maintain its secrecy.
B: The class should not be used because the scenario requires a hash sequence of 160 bits and the class only provides a hash sequence of 128 bits.
C: The class should never be considered for use in the scenario because the class uses a secret key of length 16 or 24 bytes whilst producing a hash sequence of 8 bytes.

QUESTION 32
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS536 as your development computer.
You are developing a .NET Framework 2.0 application on Certkiller -WS536. You write the class named TestScrapData.
You are required to configure the TestScrapData class and limit its access to only the code originating from a specific Web site, www. Certkiller .com and its subdomains.

The Web sites will be required to be access using HTTP, HTTPS and the FTP protocols.
You are required to additionally configure code access permissions for the TestScrapData class
What should you do?

A. The SiteIdentityPermission class should be used in the scenario.
B. The PublisherIdentityPermission class should be used in the scenario.
C. The ZoneIdentityPermission class should be used in the scenario.
D. The UrlIdentityPermission class should be used in the scenario.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: To successfully achieve your scenario objective you must use the SiteIdentityPermission class to configure code access permissions for the callers from a specific Web site.
Incorrect Answers:
B: This class should not be used as it is designed for usage to configure permissions based on the identity of the software publisher.
C: This class should not be used because it is used to configure code access permissions for the zone where the code originates and the Internet zone may contain to many Web-sites.
D: This class should not be considered for use as it is used to configure access permissions for a Uniform Resource Locator (URL).

QUESTION 33
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application that will be deployed throughout the network on all workstations which are all networked as part of a Microsoft Windows domain.
The application you wrote requires certain permissions in order to run.
As the domain administrator you configure the enterprise policy to grant the required permissions to the application which may be part of one or more code group.
You must ensure that your application receives the sufficient permissions to run at

all times whilst you override any policy changes made by the end users that lower the permissions required by the application to run.
What should you do?

A. The LevelFinal attribute should be applied to the application's code group on the enterprise policy level.
B. The Exclusive attribute should be applied to the application's code group on the user policy level.
C. The LevelFinal attribute should be applied to the application's code group on the user policy level.
D. The Exclusive attribute should be applied to the application's code group on the enterprise policy level.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The FinalLevel attribute should be applied in the scenario to the application's code group on the enterprise level as this is the highest level of policy.
Incorrect Answers:
B, D: The Exclusive attribute should not be considered in the scenario for usage as the runtime will never grant permissions associated with the code group marked with the Exclusive attribute.
C: This should not be done as you would enable the end users the capability of changing or altering security settings that will restrict the applications execution.

QUESTION 34
You work as an application developer at Certkiller .com. You are currently creating an application that requires role-based security.
You are planning to utilize a database to store the user accounts and group membership data. You need to ensure that users are able to log on and off.
You also need to ensure that the application you have created tracks the user accounts of these users, and restrict or allow access to code based on their group membership.
You need to achieve this objective with as little developer effort as possible.
What should you do to implement role-based security?

A. Inherit from the GenericIdentity and GenericPrincipal classes.
B. Make use of GenericIdentity and GenericPrincipal objects.
C. Implement the IIdentity and IPrincipal interfaces.
D. Make use of WindowsIdentity and WindowsPrincipal objects.

Answer: B
Section: (none)

Explanation/Reference:
Explanation: in this scenario, the GenericIdentity and GenericPrincipal objects could be implemented as follows: GenericIdentity curIdentity = new GenericIdentity ("CurrentUser"); string [] roles = { "Users", "Administrators" }; thread.CurrentPrincipal = GenericPrincipal (curIdentity, roles);

This code instantiates a GenericIdentity object based upon a user name as a string object, instantiates a string array representing the roles to which that user belongs, instantiates a GenericPrincipal object specifying the GenericIdentity object and string array of roles as arguments, and assigns the new GenericPrincipal object to the CurrentPrincipal property of the current thread. By assigning the new principal to the CurrentPrincipal property of the current thread, role membership checks can be performed using the IsInRole method Incorrect Answers:
A, C: These options require more developer effort than necessary.
D: The WindowsIdentity and WindowsPrincipal classes are intended for use with windows domain stored accounts and groups only.

QUESTION 35
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS554 as your development computer.
You are developing a .NET Framework 2.0 application on Certkiller -WS554.
You are trying to port an old Certkiller .com management application that was written in unmanaged Windows code with no COM interfaces.
The application you are developing makes calls to the old Certkiller .com management unmanaged library namedBillPerformance.dll.
You are required to make a call to the GetPerformaceScore method of the unmanaged Performance.dll library.
What should you do?

A. The Type Library Exporter tool (tlbexp.exe) should be used.
B. The Type Library Importer tool (tlbimp.exe) should be used.
C. The Assembly Registration tool (regasm.exe) should be used.
D. The Platform Invoke (DllImportAttribute) should be used.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The feature Platform Invoke is used to allow you to call methods that are in unmanaged libraries

but you need to declare the unmanaged method in the managed code using the extern and static keywords with the DllImport attribute which is used to specify the unmanaged library.
Incorrect Answers:
A, B, C: The tool should not be considered for usage in the scenario because the unmanaged dll file is not in COM and it only processes COM type libraries.

QUESTION 36
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS554 as your development computer.
You are developing a .NET Framework 2.0 application on Certkiller -WS554.
The application's assembly is named Certkiller App and is stored in Certkiller App.exe.
You are busy using .NET Framework's Strong Name tool to generate a pair for Certkiller App.exe shown below:
Sn.exe -k Certkiller AppKey
You are required to use the key pair to build the Certkiller App.exe as a strong named assembly.
What should you do?

A. The AssemblyKeyFileAttribute class should be used.
B. The AssemblyDelaySignAttribute class should be used.
C. The AssemblyConfigurationAttribute class should be used.
D. The AssemblyKeyNameAttribute should be used.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The Strong name tool is used to allow you to generate and manage keys for the strong name signing and by using the -k switch the tool generates a new key pair and stores it in the specified file. So using the AssemblyKeyFileAttribute is the correct way to go in the scenario.
Incorrect Answers:
B: This class should not be considered for use as it is designed to specify whether or not delayed signing should be used.
C: The class should not be used in the scenario because the class is used to specify a build configuration for an assembly.
D:
This class should not be used in the scenario because it is used to specify the name of a key container that should be used.

QUESTION 37
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS554 as your development computer.

You are developing a .NET Framework 2.0 application on Certkiller -WS554. The application will allow Certkiller .com users to send e-mails.
The Certkiller .com users must be able to send e-mail containing information like budget documents and images.
You decide to use the .NET Framework 2.0 Attachment class to create the e-mail attachments within your application.
You are required to specify the content in an attachment by using the attachment class constructors.
What should you do? (Choose two)

A. The Stream object attachment class should be used.
B. The String object attachment class should be used.

C. The Image object attachment class should be used.
D. The XmlDocument object attachment class should be used.
E. The SqlDataReader object attachment class should be used.

Answer: AB
Section: (none)

Explanation/Reference:
Explanation: In the scenario the Attachment constructors allow you to create attachments from a filename, a String object, or a Stream object.
Incorrect Answers:
C: This method is incorrect and should not be used in the scenario because the Image object Attachment class cannot directly use an Image object.
D: This method is incorrect and should not be used in the scenario because the XmlDocument Attachment class cannot directly use an XmlDocument object.
E: This method is incorrect and should not be used in the scenario because the SqlDataReader Attachment class cannot directly make use of a SqlDataReader object.

QUESTION 38
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS554 as your development computer.
You are developing a .NET Framework 2.0 application on a Certkiller -WS554.
The application will be used globally and must be able to represent characters in the following languages: English, Chinese Traditional, Hebrew and Tamil.
Your application is required to provide error detection for invalid sequences of characters whilst your application must also optimize storage.
What should you do?

A. Encode the characters in your application using the UTF8Encoding class.
B. Encode the characters in your application using the UTF7Encoding class.
C. Encode the characters in your application using the UTF32Encoding class.
D. Encode the characters in your application using the UTF16Encoding class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: To successfully enable error detection and make the class instance more secure you should make use of the UTF8Encoding class in the scenario.
Incorrect Answers:
B: The Encoding class used in this option UTF7Encoding does not provide any error detection and should not be used in the scenario.
C, D: The Encoding classes in these options should not be used in the scenario because the UTF16Encoding class represents each character as a sequence of one to two 16-bit integers and the UTF32Encoding represents each code point as a 32-bit integer.

QUESTION 39
You work as the application developer at Certkiller .com. To get information on a specific method named myMethod, you use Reflection.
You need to find out if myMethod can be accessed from a derived class.
Which of the following properties should you call from the myMethod class?

A. Call the IsAssembly property.

B. Call the IsVirtual property.
C. Call the IsStatic property.
D. Call the IsFamily property.

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The IsFamily property determines whether the method is accessible onlsecy to the class and descendant classes.
IsAssembly determines accessibility from within the assembly.
IsVirtual indicates whether the method is virtual.
IsStatic indicates whether the method is static.

QUESTION 40
You work as the application developer at Certkiller .com. You create a new class that uses unmanaged resources, but which still has references to managed resources on other objects.
You want users of the new class to be able to explicitly release resources when the class instance is no longer required.
What should you do next?
Choose the three actions which you should perform. Each correct answer presents only part of the complete solution.

A. Define the existing class so that it inherits from the WeakReference class.
B. Define the existing class so that it applies the IDisposable interface.
C. Create a new class destructor which calls methods on other objects to release the managed resources.
D. Create a new class destructor that releases the unmanaged resources.
E. Create a new Dispose method that calls System.GC.Collect to force garbage collection.
F. Create a new Dispose method that releases unmanaged resources and which also calls methods on other objects to release the managed resources.

Answer: BDF
Section: (none)

Explanation/Reference:
Explanation:
It is necessary to implement the IDisposable interface if you need to release unmanaged resources or want explicit control of the life of managed resources. A class destructor should be created to release the unmanaged resources and this should be called from within the Dispose method. The dispose method should also release the managed resources.
Inheriting from WeakReference would result in the garbage collector releasing resources even though there may be valid references.
The managed resources should be released in the Dispose method. System.GC.Collect could be used, however it is more efficient to manually release the managed resources. The GC incurs overhead and may have only recently been called anyway. The question states resources should be released explicitly.

QUESTION 41
You work as the application developer at Certkiller .com. You are developing a debug build of an existing application.
You want to locate a specific line of code which resulted in the exception occurring.
Choose the property of the Exception class that you should use to accomplish the task.

A. Data property

B. Message property
C. StackTrace property
D. Source property

Answer: C
Section: (none)

Explanation/Reference:
Explanation: The StackTrace property provides a listing of the current call stack.

Information such as the method calls and line numbers are shown. Data will return additional user-defined information about the exception Message describes the current exception but will not give details about the source code line number.
Source represents the name of the application or object that caused the error.

QUESTION 42
You work as the application developer at Certkiller .com.
You need to modify the code of an application.
The application uses two threads named thread A and thread B. You want thread B to complete executing before thread A starts executing.
How will you accomplish the task?

A. Define thread A to run at a lower priority.
B. Define thread B to run at a higher priority.
C. Implement the WaitCallback delegate to synchronize the threads.
D. Call the Sleep method of thread A.
E. Call the SpinLock method of thread A.

Answer: C
Section: (none)

Explanation/Reference:
Explanation:
Note: Some confusion why the answer is C. Using the ThreadPool and WaitCallBack will not synchronise the threads, they will run in the background in parallel

QUESTION 43
You work as the application developer at Certkiller .com.
You are developing a new application named Certkiller App12.
Certkiller App12 must be configured to receive events asynchronously.
You define two instances named Wq1EventQuery and ManagementEventWatcher respectively.
Wq1EventQuery will list those events and event conditions for which Certkiller App12 should respond.
ManagementEventWatcher will subscribe to all events matching the query.
Which two additional actions should you still perform to enable Certkiller App12 to receive events asynchronously?
Choose two correct answers. Each answer presents only part of the complete solution.

A. Call the Start method of the ManagementEventWatcher to start listening for events.
B. To configure a listener for events, use the EventArrived event of the ManagementEventWatcher.
C. To wait for the events, use the WaitFor NextEvent method of the ManagementEventWatcher.
D. Create an event handler class that contains a method which receives an ObjectReadyEventArgs parameter.
E. Use the Stopped event of the ManagementEventWatcher to configure a listener for events.

Answer: AB
Section: (none)

Explanation/Reference:
Explanation: The ManagementEventWatcher will not start to listen (hence the app cannot respond to Async messages) until the start method is called. Once the ManagementEventWatcher is listening it will trigger an EventArrived event every time an event occurs that matches the query. You should provide a listener for the EventArrived event to perform any custom handling.
WaitForNextEvent method is synchronous i.e the current thread will wait until a matching event occurs
ObjectReadyEventArgs holds data for the ObjectReadyEvent. The Stopped event is triggered when the ManagmentEventWatcher cancels it's subscription i.e is no longer interested in receiving notification of events.

QUESTION 44
You work as the application developer at Certkiller .com.
You are working on an application and want to use platform invoke services to call an unmanaged function from managed code.
How will you accomplish the task?

A. Create a class to store DLL functions. Create prototype methods by using the managed code.
B. Use COM to register the assembly. Reference the managed code from COM.
C. Export a type library for the managed code.
D. Import a type library as an assembly. Create instances of COM object.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: It is good practice to wrap the messy P-Invoke code with a .net class. The main benefit is to keep the client code tidy as the messy and cryptic code will be hidden away. Also better for maintenance e.g dll name or version changes. The question explicitly says the unmanaged code should be called with platform invoke services. Importing\exporting a type library is relevant for interoperation with COM.

QUESTION 45
You work as the application developer at Certkiller .com. You are working on an application named Certkiller App11.
Certkiller App11 must be configured to execute a series of mathematical computations simultaneously.
What should you do next to configure Certkiller App11 to execute a series of mathematical computations simultaneously?

A. Configure the IdealProcessor property of the ProcessThread object.
B. Configure the ProcessorAffinity property of the ProcessThread object.
C. Call the QueueUserWorkItem method of the ThreadPool class for each calculation which should be performed by Certkiller App11.
D. Configure the Process.GetCurrentProcess().BasePriority property to be High.

Answer: C
Section: (none)

Explanation/Reference:
Explanation: The ThreadPool class allows background tasks to run in parallel hence calculations can be queued to run as soon as a ThreadPool Worker thread becomes available. Because the ThreadPool can manage many worker threads, calculations will run in parallel.
ProcessThread.IdealProcessor requests a preferred processor for the thread to run on, it will not however spawn a new thread - which is what is required here to enable concurrency.

ProcessorAffinity gets or sets the processors that this thread can be scheduled to run on. Process.BasePriority gets the base priority of the process.

QUESTION 46
You work as the application developer at Certkiller .com.
You are developing a strong-named assembly named Certkiller Ass3.
Certkiller Ass3 will be used by multiple applications.
You plan to frequently rebuild Certkiller Ass3 during the development lifecycle.
Whenever Certkiller Ass3 is rebuilt, you must ensure that it works as expected with all applications that will use it.
You must configure the computer that you are using to create Certkiller Ass3 so that all applications reference the latest build of Certkiller Ass3.
Choose the two actions which you should perform to achieve your goal.
Each correct answer presents only part of the complete solution.

A. Create a DEVPATH environment variable which points to the build output directory for Certkiller Ass3.
B. Include this XML element in the computer configuration file:
<developmentMode developerInstallation="true"/>
C. Include this XML element in the computer configuration file:
<dependentAssembly>
<assemblyIdentity name=" Certkiller Ass3"
publicKeyToken="32ab4ba45e0a69a1"
language="en-US" version="*.*.*.*" />
<publisherPolicy apply="no" />
</dependentAssembly>
D. Include this XML element in the configuration file of each application that must use Certkiller Ass3:
<supportedRuntime version="*.*.*.*" />
E. Include this XML element in the configuration file of each application that must use Certkiller Ass3:
<dependentAssembly>
<assemblyIdentity name=" Certkiller Ass3"
publicKeyToken="32ab4ba45e0a69a1"
language="en-US" version="*.*.*.*" />
<bindingRedirect newVersion="*.*.*.*"/>
</dependentAssembly>

Answer: AB
Section: (none)

Explanation/Reference:
Explanation: The developmentmode element in the machine configuration file tells the .net runtime to locate the assembly by using the DevPath environment variable. The SupportedRuntime element specifies which .net runtime versions the assembly supports.
The DependentAssembly element is used to encapsulate the binding policy and assembly location for each assembly.

QUESTION 47
You work as the application developer at Certkiller .com.
You are writing a method that will run through the credentials of the end user. Microsoft Windows groups must be used to authorize the user.
You must develop the code segment which will recognize if the user exists in the local group named Sales.
Choose the code segment that will do this.

A. WindowsIdentity currentUser = WindowsIdentity.GetCurrent();
foreach (IdentityReference grp in currentUser.Groups) {
NTAccount grpAccount = ((NTAccount)grp.Translate(typeof(NTAccount)));
isAuthorized = grpAccount.Value.Equals(Environment.MachineName + @"\Sales");
if (isAuthorized) break;
}

B. WindowsPrincipal currentUser = (WindowsPrincipal)Thread.CurrentPrincipal;
isAuthorized = currentUser.IsInRole("Sales");

C. GenericPrincipal currentUser = (GenericPrincipal) Thread.CurrentPrincipal;
isAuthorized = currentUser.IsInRole("Sales");

D. WindowsPrincipal currentUser = (WindowsPrincipal)Thread.CurrentPrincipal;
isAuthorized = currentUser.IsInRole(Environment.MachineName);

Answer: B
Section: (none)

Explanation/Reference:
Explanation: To check the role membership of the current Windows user, user the IsInRole() method of the WindowsPrincipal in the current thread. A it is a lot more complicated to iterate through all the groups the user belongs to and checking for matches. The Principal classes are for this very purposes and should be used.
C uses GenericPrincipal. WindowsPrincipal should be used for windows accounts. There is an invalid cast from WindowsPrincipal to GenericPrincipal.
D does not specify the group correctly.

QUESTION 48
You work as the application developer at Certkiller .com.
You are developing a new application named Certkiller App06.
Certkiller App06 will be used to transmit confidential financial information over the network.
To secure the confidential data, you create an X509 Certificate object named certificate and create a TcpClient object named client.
You must now create the code segment that creates an SslStream for communication by applying the Transport Layer Security 1.0 protocol.
Choose the code segment which you should use.

A. SslStream ssl = new SslStream(client.GetStream());
ssl.AuthenticateAsServer(
certificate, false, SslProtocols.None, true);

B. SslStream ssl = new SslStream(client.GetStream());
ssl.AuthenticateAsServer(
certificate, false, SslProtocols.Ssl3, true);

C. SslStream ssl = new SslStream(client.GetStream());
ssl.AuthenticateAsServer(
certificate, false, SslProtocols.Ssl2, true);

D. SslStream ssl = new SslStream(client.GetStream());
ssl.AuthenticateAsServer(
certificate, false, SslProtocols.Tls, true);

Answer: D
Section: (none)

Explanation/Reference:

QUESTION 49

You work as the application developer at Certkiller .com.
You are developing a new method that must encrypt confidential data.
The method must use the Data Encryption Standard (DES) algorithm. Your new method takes these parameters:

1. A byte array, named message, that must be encrypted by applying the DES algorithm.
2. A key, named key, which will be used to encrypt the data.
3. The initialization vector, named iv.

Once the data is encrypted, it must be added to the MemoryStream object.
Choose the code segment which will encrypt the specified data and add it to the MemoryStream object.

A.
```
DES des = new DESCryptoServiceProvider();
des.BlockSize = message.Length;
ICryptoTransform crypto = des.CreateEncryptor(key, iv);
MemoryStream cipherStream = new MemoryStream();
CryptoStream cryptoStream = new CryptoStream(cipherStream, crypto, CryptoStreamMode.Write);
cryptoStream.Write(message, 0, message.Length);
```
B.
```
DES des = new DESCryptoServiceProvider();
ICryptoTransform crypto = des.CreateDecryptor(key, iv);
MemoryStream cipherStream = new MemoryStream();
CryptoStream cryptoStream = new CryptoStream(cipherStream, crypto, CryptoStreamMode.Write);
cryptoStream.Write(message, 0, message.Length);
```
C.
```
DES des = new DESCryptoServiceProvider();
ICryptoTransform crypto = des.CreateEncryptor();
MemoryStream cipherStream = new MemoryStream();
CryptoStream cryptoStream = new CryptoStream(cipherStream, crypto, CryptoStreamMode.Write);
cryptoStream.Write(message, 0, message.Length);
```
D.
```
DES des = new DESCryptoServiceProvider();
ICryptoTransform crypto = des.CreateEncryptor(key, iv);
MemoryStream cipherStream = new MemoryStream();
CryptoStream cryptoStream = new CryptoStream(cipherStream, crypto, CryptoStreamMode.Write);
cryptoStream.Write(message, 0, message.Length);
```

Answer: D
Section: (none)

Explanation/Reference:
Explanation: Use the DesCryptoServiceProvider to create a new encryptor.Create a CryptoStream that encrypt directly to the MemoryStream and call the Write() method to perform the encryption.
A Uses a blocksize set to size of the entire message
B creates a decryptor instead of an encryptor.
C does not initialize the encryptor with the key and iv correctly.

QUESTION 50
You work as the application developer at Certkiller .com.
You have to create a new security policy for an application domain which must enforce the new Certkiller .com security policy.
You write the code segment to do this:

```
PolicyLevel policy = PolicyLevel.CreateAppDomainLevel();
PolicyStatement noTrustStatement =new PolicyStatement(policy.GetNamedPermissionSet("Nothing"));
PolicyStatement fullTrustStatement =
new PolicyStatement(
policy.GetNamedPermissionSet("FullTrust"));
```

You must now ensure that all loaded assemblies default to the Nothing permission set.
In addition to this, when an assembly comes from a trusted zone, your security policy must grant the assembly the FullTrust permission set. You must create the code groups to do this.
Choose the code segment which will achieve this objective.

A. CodeGroup group1 = new FirstMatchCodeGroup(new ZoneMembershipCondition(SecurityZone.Trusted), fullTrustStatement);
 CodeGroup group2 = new UnionCoderoup(
 new AllMembershipCondition(),
 noTrustStatement);
 group1.AddChild(group2);
B. CodeGroup group1 = new FirstMatchCodeGroup(new AllMembershipCondition(),noTrustStatement);
 CodeGroup group2 = new UnionCodeGroup(
 new ZoneMembershipCondition(SecurityZone.Trusted),
 fullTrustStatement);
 group1.AddChild(group2);
C. CodeGroup group = new UnionCodeGroup(new ZoneMembershipCondition(SecurityZone.Trusted), fullTrustStatement);
D. CodeGroup group = new FirstMatchCodeGroup(new AllMembershipCondition(),noTrustStatement);

Answer: B
Section: (none)

Explanation/Reference:

QUESTION 51
You are writing a method that accepts a string parameter named message.
Your method must break the message parameter into individual lines of text and pass each line to a second method named Process.
Which code segment should you use?

A. StringReader reader = new StringReader(message);
 Process(reader.ReadToEnd());
 reader.Close();
B. StringReader reader = new StringReader(message);
 while (reader.Peek() != -1) {
 string line = reader.Read().ToString();
 Process(line);
 }
 reader.Close();
C. StringReader reader = new StringReader(message);
 Process(reader.ToString());
 reader.Close();
D. StringReader reader = new StringReader(message);
 while (reader.Peek() != -1) {
 Process(reader.ReadLine());
 }
 reader.Close();

Answer: D
Section: (none)

Explanation/Reference:
Explanation: StringReader.ReadLine() allows for lines to be read line by line.

A ReadToEnd() will read the entire stream.

B Read() will not read the line but only the next character.

C will not read from the message but will just give a string representation of the reader.

· ReadLine !!!

QUESTION 52
you have recently written the code shown below:

```
Hashtable emailAddresses = new Hashtable ();
emailAddresses.Add ("Mia", "mia@ Certkiller .com");
emailAddresses.Add ("Andy", "andy@ Certkiller .com");
emailAddresses.Add ("Kara", "kara@ Certkiller .com");
```

You need to ensure that these e-mail addresses are stored in the Email.dat file so that you can load them again when the user restarts the application.
What should you do?

A. Add the following code:
```
FileStream stream = new FileStream ("Email.dat", FileMode.Create);
BinaryFormatter formatter = new BinaryFormatter ();
formatter.Deserialize(stream, emailAddresses);
```
B. Add the following code:
```
FileStream stream = new FileStream ("Email.dat", FileMode.Create);
BinaryFormatter formatter = new BinaryFormatter ();
formatter.Serialize(stream, emailAddresses);
```
C. Add the following code:
```
FileStream stream = new FileStream ("Email.dat", FileMode.Create);
stream.Serialize(emailAddresses);
```
D. Add the following code:
```
FileStream stream = new FileStream ("Email.dat", FileMode.Create);
stream.WriteObject(emailAddresses);
```

Answer: B
Section: (none)

Explanation/Reference:
This code instantiates a file stream, instantiates a BinaryFormatter object, and serializes the emailAddresses object to the Email.dat file. The FileStream constructor takes a file path string and FileMode enumeration as arguments. The Serialize method of the BinaryFormatter class takes two arguments, a stream and the object to be serialized.
The Serialize method uses the stream to write the object to the destination.

Incorrect Answers:
A: You should not add the code that invokes the Deserialize method of the BinaryFormatter class because you must serialize the object first. C D: You should not add the code fragments that do not instantiate the BinaryFormatter object
because the WriteObject and Serialize methods do not exist in the FileStream class.

· Achtung die Frage meint Serialisierung und nicht Kontrolle mit Deserialisierung · dann ist es einfach oder !!!

QUESTION 53

Certkiller .com has a file server named Certkiller -SR07 that stores old inventory files. Certkiller .com has given you the task of creating an application to archive these old inventory files.
The inventory files have to be compressed prior to being uploaded to Certkiller .com's Web server.
You are currently writing a method that will receive a byte array and compress it into a new file.
You need to ensure that a data corruption check takes place during the decompression process.
What should you do?

A. Use the following code:
```
public void CompressFileWrite(string file, byte[] data){
FileStream fs = new FileStream(file, FileMode.Create);
DeflateStream cs = new DeflateStream( fs, Compressionmode.Compress, true);
cs.Write (data, 0, data.Length);
cs.Close();
}
```
B. Use the following code:
```
public void CompressFileWrite(string file, byte[] data){
FileStream fs = new FileStream (file, FileMode.Create);
GZipStream cs = new GZipStream( fs, Compressionmode.Compress, true);
cs.Compress (data, 0, data.Length);
cs.Close ();
}
```
C. Use the following code:
```
public void CompressFileWrite(string file, byte[] data){
FileStream fs = new FileStream(file, FileMode.Create);
DeflateStream cs = new DeflateStream( fs, Compressionmode.Compress, true);
cs.Compress(data, 0, data.Length);
cs.Close ();
}
```
D. Use the following code:
```
public void CompressFileWrite (string file, byte[] data){
FileStream fs = new FileStream(file, FileMode.Create);
GZipStream cs = new GZipStream( fs, Compressionmode.Compress, true);
cs.Write(data, 0, data.Length);
cs.Close();
}
```

Answer: D
Section: (none)

Explanation/Reference:
Explanation:
Incorrect Answers:
A, B, C: You should not use the code fragments that specify the DeflateStream class because this data format does not ensure that a data corruption check occurs during decompression. You should also not use the code that invokes the Compress method because no such method exists in the GZipStream or the DeflateStream classes.

· GZIP HAT data corruption check
· CompressionMode.Decompress bzw. CompressionMode.Compress · Read-Methode bzw. Write-Methode

QUESTION 54
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing an application that will be used to connect and control the behavior of existing services installed on a network server named Certkiller -SR01.
What should you do?

A. Use the MachineName and ServiceName properties of the ServiceController class.
B. Use the Site property of the ServiceController class.
C. Use the Site property of the ServiceInstaller class.
D. Use the ServiceName and DisplayName properties of the ServiceInstaller class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The proper way to connect and control the behavior of existing services is by using the ServiceController class after which you are required to set two properties on it to identify the service to interact with. The MachineName property is used to define the computer Certkiller -SR01.
Incorrect Answers:
B, C: The Site property of the ServiceController and ServiceInstaller class should not be used because they bind a component to a container and enables communication between them.
D: This property should not be used as it is meant to specify the name of the service at the time of installation. The DisplayName property is used to specify the friendly name of the service at the time of installation.

Exam D

QUESTION 1
You work as the application developer at Certkiller .com. You create a new class named User.
The User class contains this code segment:
public class User {
string userId, userName, jobTitleName;
public string GetName() { return userName;
}
public string GetTitle() { return jobTitleName;
}
You want to expose the User class to COM in a type library.
You also want the COM interface to facilitate forward-compatibility across new versions of the User class.
What should you do to achieve your goal in these circumstances?

A. Include this attribute with the class definition:
[ClassInterface(ClassInterfaceType.None)]public class User {
B. Include this attribute with the class definition:
[ClassInterface(ClassInterfaceType.AutoDual)]public class User {
C. Include this attribute with the class definition:
[ComVisible(true)]public class User {
D. Specify the interface for the User class and then add this attribute with the class definition:
[ClassInterface(ClassInterfaceType.None)]public class User : IUser {

Answer: D
Section: (none)

Explanation/Reference:

QUESTION 2
You work as the application developer at Certkiller .com.
You want to modify the current security settings of a file named Certkiller Data.xml, as follows:
1. You must preserve all existing inherited access rules.
2. You must prevent the access rules from inheriting future modifications Choose the code segment which will accomplish the task.

A. FileSecurity security = new FileSecurity(" Certkiller data.xml", AccessControlSections.All);
security.SetAccessRuleProtection(true, true);
File.SetAccessControl(" Certkiller data.xml", security);
B. FileSecurity security = new FileSecurity();
security.SetAccessRuleProtection(true, true);
File.SetAccessControl(" Certkiller data.xml", security);
C. FileSecurity security = File.GetAccessControl(" Certkiller data.xml");
security.SetAccessRuleProtection(true, true);
D. FileSecurity security = File.GetAccessControl(" Certkiller data.xml");
security.SetAuditRuleProtection(true, true);
File.SetAccessControl(" Certkiller data.xml", security);

Answer: A
Section: (none)

Explanation/Reference:
Explanation: Retrieve the full access control list for the file, prevent access rules from inheriting in the future by calling Security.SetAccessRuleProtection(). Finally call File.SetAccessControl() to apply the amended

FileSecurity to the file. B does not preserve the existing access rules. It overwrites them. C does not apply the amended FileSecurity object back to the file. D FileSecurity.SetAuditRuleProtection() is used for controlling audit rules not access rules.

QUESTION 3
You work as the application developer at Certkiller .com.
You are creating a class library which must be able to access system environment variables.
You must set a call method which will only force a runtime SecurityException if the callers which are higher in the call stack, fail to have the required permissions.
Choose the call method which will do this.

A. Demand()
B. Assert()
C. PermitOnly()
D. Deny()

Answer: A
Section: (none)

Explanation/Reference:
Demand forces all callers in the call stack to have the specified permission. PermitOnly will instruct the runtime to reduce the access by only allowing callers with the permissions explicitly stated and nothing else.
Assert will ignore the permissions of callers and allow them indiscriminately. Deny will explicitly deny access if the caller has the specified permission.

QUESTION 4
You are defining a class named Certkiller Class that contains several child objects.
Certkiller Class contains a method named ProcessChildren that performs actions on the child objects.
Certkiller Class objects will be serializable.
You need to ensure that the ProcessChildren method is executed after the Certkiller Class object and all its child objects are reconstructed.
Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Apply the OnDeserializing attribute to the ProcessChildren method.
B. Specify that Certkiller Class implements the IDeserializationCallback interface.
C. Specify that Certkiller Class inherits from the ObjectManager class.
D. Apply the OnSerialized attribute to the ProcessChildren method.
E. Create a GetObjectData method that calls ProcessChildren.
F. Create an OnDeserialization method that calls ProcessChildren.

Answer: BF
Section: (none)

Explanation/Reference:
Explanation: The IDeserializationCallback interface allows some custom code to be called after the complete object graph has been
deserialized via the onDeserialization method.
In this case the ProcessChildren should be called in the onDeserialization method.

Applying OnDeserializingAttribute to the ProcessChildren method will not work because there is not guarantee that the complete object graph will have been deserialized.

If the Certkiller class inherits from ObjectManager it will still have to implement iDeserializationCallback to

perform actions after the complete object graph has been deserialized.

The OnSerialized attribute signifies that a method should be called immediately after serialization of the object.

· IDeserializationCallback - OnDeserialization !!!

QUESTION 5
Certkiller .com uses an application named Application1 that was compiled by using the .NET Framework version 1.0.
The application currently runs on a shared computer on which the .NET Framework versions 1.0 and 1.1 are installed.
You need to move the application to a new computer on which the .NET Framework versions 1.1 and 2.0 are installed.
The application is compatible with the .NET Framework 1.1, but it is incompatible with the .NET Framework 2.0.
You need to ensure that the application will use the .NET Framework version 1.1 on the new computer.
What should you do?

A. Add the following XML element to the application configuration file.
<configuration>
<startup>
<supportedRuntime version="1.1.4322" />
<startup>
</configuration>

B. Add the following XML element to the application configuration file.
<configuration>
<runtime>
<assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1"> <dependentAssembly>
<assemblyIdentity name="Application1" publicKeyToken="32ab4ba45e0a69a1" culture="neutral" />
<bindingRedirect oldVersion="1.0.3075.0" newVersion="1.1.4322.0"/> </dependentAssembly>
</assemblyBinding>
</runtime>
</configuration>

C. Add the following XML element to the machine configuration file.
<configuration>
<startup>
<requiredRuntime version="1.1.4322" />
<startup>
</configuration>

D. Add the following XML element to the machine configuration file.
<configuration>
<runtime>
<assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1"> <dependentAssembly>
<assemblyIdentity name="Application1" publicKeyToken="32ab4ba45e0a69a1" culture="neutral" />
<bindingRedirect oldVersion="1.0.3075.0" newVersion="1.1.4322.0"/> </dependentAssembly>
</assemblyBinding>
</runtime>
</configuration>

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 6

You create a class library that contains the class hierarchy defined in the following code segment.
(Line numbers are included for reference only.)
01 public class Group {
02 public Employee[] Employees;
03 }
04 public class Employee {
05 public string Name;
06 }
07 public class Manager : Employee {
08 public int Level;
09 }
You create an instance of the Group class. You populate the fields of the instance.
When you attempt to serialize the instance by using the Serialize method of the XmlSerializer class, you receive InvalidOperationException.
You also receive the following error message: "There was an error generating the XML document."
You need to modify the code segment so that you can successfully serialize instances of the Group class by using the XmlSerializer class.
You also need to ensure that the XML output contains an element for all public fields in the class hierarchy.
What should you do?

A. Insert the following code between lines 1 and 2 of the code segment:
 [XmlArrayItem(Type = typeof(Employee)),
 XmlArrayItem(Type = typeof(Manager))]
B. Insert the following code between lines 1 and 2 of the code segment:
 [XmlElement(Type = typeof(Employees))]
C. Insert the following code between lines 1 and 2 of the code segment:
 [XmlArray(ElementName="Employees")]
D. Insert the following code between lines 3 and 4 of the code segment:
 [XmlElement(Type = typeof(Employee))]
 And
 Insert the following code between lines 6 and 7 of the code segment:
 [XmlElement(Type = typeof(Manager))]

Answer: A
Section: (none)

Explanation/Reference:
· EIne Array mit Elementen vom Typ Employee(Basisklasse) oder vom Typ Manager(abgeleitete Klasse) .

· Daher 2 XmlArrayItem-Einträge !!!

QUESTION 7
You create a class library that is used by applications in three departments of Certkiller .com.
The library contains a Department class with the following definition.
public class Department {
public string name;
public string manager;
}
Each application uses a custom configuration section to store department-specific values in the application configuration file
as shown in the following code.
<Department>
<name>Hardware</name>
<manager>Certkiller</manager>
</Department>
You need to write a code segment that creates a Department object instance by using the field values retrieved

from the application configuration file.
Which code segment should you use?

A. public class deptElement : ConfigurationElement {
protected override void DeserializeElement(XmlReader reader, bool serializeCollectionKey) {
Department dept = new Department();
dept.name = ConfigurationManager.AppSettings["name"];
dept.manager = ConfigurationManager.AppSettings["manager"]; return dept;
}
}
B. public class deptElement: ConfigurationElement {
protected override void DeserializeElement(XmlReader reader, bool serializeCollectionKey) {
Department dept = new Department();
dept.name = reader.GetAttribute("name");
dept.manager = reader.GetAttribute("manager");
}
}
C. public class deptHandler : IConfigurationSectionHandler { public object Create(object parent, object configContext, System.Xml.XmlNode section) {
Department dept = new Department();
dept.name = section.SelectSingleNode("name").InnerText;
dept.manager = section.SelectSingleNode("manager").InnerText; return dept;
}
}
D. public class deptHandler : IConfigurationSectionHandler { public object Create(object parent, object configContext, System.Xml.XmlNode section) {
Department dept = new Department();
dept.name = section.Attributes["name"].Value;
dept.manager = section.Attributes["manager"].Value;
return dept;
}
}

Answer: C
Section: (none)

Explanation/Reference:

QUESTION 8
You write the following code to implement the CertkillerClass.MyMethod function.
public class CertkillerClass {
public int MyMethod(int arg) {
return arg;
}
}
You need to call the CertkillerClass.MyMethod function dynamically from an unrelated class in your assembly.
Which code segment should you use?

A. CertKillerClass myClass = new CertKillerClass();
Type t = typeof(CertKillerClass);
MethodInfo m = t.GetMethod("MyMethod");
int i = (int)m.Invoke(this, new object[] {1});

B. CertKillerClass myClass = new CertKillerClass();
Type t = typeof(CertKillerClass);
MethodInfo m = t.GetMethod("MyMethod");
int i = (int)m.Invoke(myClass, new object[] {1});

C. CertKillerClass myClass = new CertKillerClass();
Type t = typeof(CertKillerClass);
MethodInfo m = t.GetMethod("CertKillerClass.MyMethod");
int i = (int)m.Invoke(myClass, new object[] {1});

D. Type t = type.GetType(CertKillerClass);
MethodInfo m = t.GetMethod("MyMethod");
int i = (int)m.Invoke(this, new object[] {1});

Answer: B
Section: (none)

Explanation/Reference:
Explanation: Use reflection to get MethodInfo object that corresponds to the MyMethod member function.
Call the Invoke() method of MethodInfo

· Im Orginal sind A und B ident - hier:

· Fehler:
· int i = (int)m.Invoke(this, new object[] {1}); // statt this eine Instanz von CertKillerClass
· MethodInfo m = t.GetMethod("CertKillerClass.MyMethod"); // statische Methode
· int i = (int)m.Invoke(this, new object[] {1}); // statt this eine Instanz von CertKillerClass - welche hier nicht vorhanden ist

QUESTION 9
You work as the application developer at Certkiller .com.
Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows application that will make use of an assembly named BillAssembly.
The assembly file BillAssembly.dll is deployed in a folder named Test20 under the application root directory.
The BillAssembly assembly was not strongly named

You are required to configure the Windows application to specify the location of the BillAssembly assembly whilst any settings that you change not affect other applications installed on the system.
What should you do?

A. The application configuration file must be modified to add the following setting to the <assemblyBinding> section:
<probing privatePath="Test20\BillAssembly.dll"/>

B. The machine configuration file should be modified to add the following setting to the <assemblyBinding> section:
<codeBase href="Test20"/>

C. The machine configuration file must be modified to add the following setting to the <assemblyBinding> section for the BillAssembly assembly:
<codeBase href="Test20/BillAssembly.dll"/>

D. The application configuration file should be modified to add the following section to the <assemblyBinding> section:
<probing privatePath="Test20"/>

Answer: D
Section: (none)

Explanation/Reference:
Explanation: Since the BillAssembly assembly is not strongly named the configuration will have to be made at the local level by making use of the application configuration files as is the case in the scenario.
Incorrect Answers:
A, B: The modification of the machine configuration file is incorrect as the assembly in

QUESTION 10
You work as the application developer at Certkiller .com.
You are working on a new application named Certkiller App05. Certkiller App05 is configured to dynamically load assemblies from the application directory.
You must define the code segment that will dynamically load an assembly named Certkiller Ass25.dll into the current application domain.
Choose the code segment which you should use to accomplish this task.

A. AppDomain domain = AppDomain.CurrentDomain;
 string myPath = Path.Combine(domain.BaseDirectory," Certkiller Ass25.dll");
 Assembly asm = Assembly.LoadFrom(myPath);
B. AppDomain domain = AppDomain.CurrentDomain;
 string myPath = Path.Combine(domain.BaseDirectory," Certkiller Ass25.dll ");
 Assembly asm = Assembly.Load(myPath);
C. AppDomain domain = AppDomain.CurrentDomain;
 string myPath = Path.Combine(domain.DynamicDirectory," Certkiller Ass25.dll");
 Assembly asm = AppDomain.CurrentDomain.Load(myPath);
D. AppDomain domain = AppDomain.CurrentDomain;
 Assembly asm = domain.GetData(" Certkiller Ass25.dll");

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The Assembly.LoadFrom() method can be called to dynamically load

an assembly from file.
B the Load method requires an AssemblyName object as a parameter. C it is not possible to use AppDomain. Load to load an assembly from file. D AppDomain.GetData gets information stored in the AppDomain for the specified assembly. It cannot load an assembly.

QUESTION 11
You work as the application developer at Certkiller .com.
You are creating a new code segment.
You must ensure that the data contained within an isolated storage file, named Settings.dat, is returned as a string.
Settings.dat is machine-scoped.
Choose the code segment which will achieve your goal.

A. IsolatedStorageFileStream isoStream;
 isoStream = new IsolatedStorageFileStream("Settings.dat", FileMode.Open);
 string result = new StreamReader(isoStream).ReadToEnd();
B. IsolatedStorageFile isoFile;
 isoFile = IsolatedStorageFile.GetMachineStoreForAssembly();
 IsolatedStorageFileStream isoStream;
 isoStream = new IsolatedStorageFileStream("Settings.dat", FileMode.Open, isoFile);
 string result = new StreamReader(isoStream).ReadToEnd();

C. IsolatedStorageFileStream isoStream;
isoStream = new IsolatedStorageFileStream("Settings.dat", FileMode.Open);
string result = isoStream.ToString();

D. IsolatedStorageFile isoFile;
isoFile = IsolatedStorageFile.GetMachineStoreForAssembly();
IsolatedStorageFileStream isoStream;
isoStream = new IsolatedStorageFileStream("Settings.dat", FileMode.Open, isoFile);
string result = isoStream.ToString();

Answer: B
Section: (none)

Explanation/Reference:
Explanation: Retrieve the IsolatedStorageFile for the machine store. Use an IsolatedStorageFileStream to read from the desired file within the machine store. A & C do not get the IsolatedStorageFile for the machine context. D returns a string representation of the IsolatedStorageFileStream object not a String of the files contents as the question requests.

QUESTION 12
You work as the application developer at Certkiller .com.
You create a new service application named Certkiller App29.
You install Certkiller App29 on five application servers running in the Certkiller .com network.
You then apply the code segment shown below. Note that line numbers are only included for reference pruposes.

```
01 public void StartService(string serverName){
02 ServiceController crtl = new
03 ServiceController(" Certkiller App29");

04 if (crtl.Status == ServiceControllerStatus.Stopped){
05 }
06 }
```

You want Certkiller App29 to start if it stops.
You must create the routine which will start Certkiller App29 on the server defined by the serverName input parameter.
Choose the two lines of code which you should include in your code segment.
Each correct answer presents only part of the complete solution. Choose two answers.

A. Add this line of code between line 03 and line 04: crtl.ServiceName = serverName;
B. Add this line of code between line 03 and line 04: crtl.MachineName = serverName;
C. Add this line of code between line 03 and line 04:crtl.Site.Name = serverName;
D. Add this line of code between line 04 and line 05:crtl.Continue();
E. Add this line of code between line 04 and line 05:crtl.Start();
F. Add this line of code between line 04 and line 05:crtl.ExecuteCommand(0);

Answer: BE
Section: (none)

Explanation/Reference:
Explanation: The ServiceController is capable of controller services on other computers, the MachineName should be specified. The service should be started with the Start() method if it is in the stopped state. Setting the ServiceName to the machine name is incorrect.
No such property as SiteName
Continue cannot re-start a stopped service only a paused one. ExecuteCommand is used to fire a custom

command on the service.

QUESTION 13
You work as the application developer at Certkiller .com.
You are developing a new application named Certkiller 15. Certkiller 15 will be used to show processes running on remote computers.
You need to write a method for the application. Your method must accomplish the following:
1. Accept the name of the remote computer as a string parameter named strComputer.
2. Return an ArrayList object that lists the names of each process running on that specific remote computer.
Choose the code segment that will accomplish the task

A.
```
ArrayList al = new ArrayList();
Process[] procs = Process.GetProcessesByName(strComputer);
foreach (Process proc in procs) {
al.Add(proc);
}
```
B.
```
ArrayList al = new ArrayList();
Process[] procs = Process.GetProcesses(strComputer);
foreach (Process proc in procs) {
al.Add(proc);
}
```
C.
```
ArrayList al = new ArrayList();
Process[] procs = Process.GetProcessesByName(strComputer);
foreach (Process proc in procs) {
al.Add(proc.ProcessName);
}
```
D.
```
ArrayList al = new ArrayList();
Process[] procs = Process.GetProcesses(strComputer);
foreach (Process proc in procs) {
al.Add(proc.ProcessName);
}
```

Answer: D
Section: (none)

Explanation/Reference:
Explanation: Call Processes.GetProcesses() supplying the name of the computer and then iterate through the returned collection of processes adding the process name to the arraylist.
A & C use GetProcessByName() and return processes on the current computer only. B adds the entire process to the arraylist rather than just the process name.

· Kommt

QUESTION 14
You work as the application developer at Certkiller .com.
You write the definition for a class named Vehicle by defining the following code segment:
```
public class Vehicle {
[XmlAttribute(AttributeName = "category")]
public string vehicleType;
public string model;
[XmlIgnore]
public int year;
[XmlElement(ElementName = "mileage")]
public int miles;
public ConditionType condition;
```

```
public Vehicle() {
}
public enum ConditionType {
[XmlEnum("Poor")] BelowAverage,
[XmlEnum("Good")] Average,

[XmlEnum("Excellent")] AboveAverage
}}
```

You next create an instance of the Vehicle class, and add the following data in the defined fields of the class instance:
You must now identify the XML block that is generated when the Vehicle class instance is serialized.
Choose the XML block that signifies the output of serializing the Vehicle class instance.

A.
```
<?xml version="1.0" encoding="utf-8"?>
<Vehicle xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/
XMLSchema"" vehicleType="car">
<model>racer</model>
<miles>15000</miles>
<condition>AboveAverage</condition>
</Vehicle>
```

B.
```
<?xml version="1.0" encoding="utf-8"?>
<Vehicle xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/
XMLSchema" category="car">
<model>racer</model>
<mileage>15000</mileage>
<condition>Excellent</condition>
</Vehicle>
```

C.
```
<?xml version="1.0" encoding="utf-8"?>
<Vehicle xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/
XMLSchema" category="car">
<model>racer</model>
<mileage>15000</mileage>
<conditionType>Excellent</conditionType>
</Vehicle>
```

D.
```
<?xml version="1.0" encoding="utf-8"?>
<Vehicle xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/
XMLSchema">
<category>car</category>
<model>racer</model>
<mileage>15000</mileage>
<condition>Excellent</condition>
</Vehicle>
```

Answer: B
Section: (none)

Explanation/Reference:
Answer: B
Explanation: The XML produced in B matches the class definition provided in the

QUESTION 15
You work as the application developer at Certkiller .com.
You are working on a component which serializes the Meeting class instances.
The definition of the Meeting class is as follows:

```
public class Meeting {
private string title;
```

```
public int roomNumber;
public string[] invitees;
public Interview(){
}
public Interview (string t){
title = t;
} }
```

You configure the following procedure for your component:

```
Meeting myMeeting = new Meeting("Objectives");
myMeeting.roomNumber=20;
string[] attendees = new string[2]{"Amy", "Ally"};
myMeeting.invitees = attendees;
XmlSerializer xs = new XmlSerializer(typeof(Meeting));
StreamWriter writer = new StreamWriter(@"C:\Meeting.xml");
xs.Serialize(writer, myMeeting);
writer.Close();
```

You want to find out which XML block will be written to the C:\Meeting.xml file when the procedure is executed.
Choose the XML block that shows which content will be written to the C:\Meeting.xml file?

A.
```
<?xml version="1.0" encoding="utf-8"?>
<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/
XMLSchema-instance">
<title>Objectives</title>
<roomNumber>20</roomNumber>
<invitee>Amy</invitee>
<invitee>Ally</invitee>
</Meeting>
```

B.
```
<?xml version="1.0" encoding="utf-8"?>
<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/
XMLSchema-instance">
<roomNumber>20</roomNumber>
<invitees>
<string>Amy</string>
<string>Ally</string>
</invitees>
</Meeting>
```

C.
```
<?xml version="1.0" encoding="utf-8"?>
<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/
XMLSchema-instance" title="Objectives">
<roomNumber>20</roomNumber>
<invitees>
<string>Amy</string>
<string>Ally</string>
</invitees>
</Meeting>
```

D.
```
<?xml version="1.0" encoding="utf-8"?>
<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/
XMLSchema-instance">
<roomNumber>20</roomNumber>
<invitees>
<string>Amy</string>
</invitees>
<invitees>
<string>Ally</string>
</invitees>
</Meeting>
```

Answer: B
Section: (none)

Explanation/Reference:
Explanation: A & C show title member in the XML. Title is a private member hence will not be serialized to XML.
D Shows multiple Invitees. There is only one object of type Invitees in the class definition.

QUESTION 16
Certkiller .com has asked you to develop an application allows administrators to control Windows services dynamically without using the Services MMC.
You start by creating a class named LocalServiceController. You need to add the correct code to the LocalServiceController class to ensure that administrators are
able to start local Windows services.

What code should you use?

A.
```
public static bool StartService (string serviceName) {
try {
ServiceBase.Run (serviceName);
return true;
}
catch {
return false;
}
}
```
B.
```
public static bool StartService (string serviceName) {
ServiceController controller = new ServiceController (serviceName);
if (controller.Status != ServiceControllerStatus.Running) {
controller.Start ();
return true;
}
else
return false;
}
```
C.
```
public static bool StartService (string serviceName) {
ServiceManager manager = new ServiceManager (serviceName);
if (manager.Status != ServiceManagerStatus.Running) {
manager.Start ();
return true;
}
else
return false;
}
```
D.
```
public static bool StartService (string serviceName) {
ServiceBase service = new ServiceBase ();
service.ServiceName = serviceName;
if (service.CanStart) {
ServiceBase.Run (service);
return true;
}
else
return false;
}
```

Answer: B

Section: (none)

Explanation/Reference:
Answer: B ---------- ServiceController !!!

QUESTION 17
You are required to dynamically load assemblies into a custom child application domain.
You need to ensure that the assemblies loaded into the child application domain have the same permissions as the applications that are accessed across the local intranet.
What should you do?

A. Use the following code to create the child application domain:
 Evidence childEvidence = new Evidence(new object [] { SecurityZone.Intranet }, null);
 AppDomain.CreateDomain("ChildDomain", childEvidence);
B. Use the following code to create the child application domain:
 AppDomain.CreateDomain("ChildDomain", SecurityZone.Intranet);
C. Use the following code to create the child application domain:
 AppDomain domain = new AppDomain("ChildDomain", SecurityZone.Intranet);
D. Use the following code to create the child application domain:
 Evidence childEvidence = new Evidence (new object [] { SecurityZone.Intranet }, null);
 AppDomain domain = new AppDomain ("ChildDomain", childEvidence);

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The CreateDomain method of the AppDomain class is an overload method that can be used to create an application domain.
This code creates a child application domain named ChildDomain with the default permissions of applications that are accessed across the local intranet.

Incorrect Answers:
B: You should not use the code that specifies SecurityZone.Intranet as an argument to the CreateDomain method because no such method signature exists. C, D: You should not use the code fragments that instantiate an AppDomain object because the AppDomain class does not have any constructors.

· AppDomain hat keinen Konstruktor - nur die statische Methode CreateDomain · Es kann nur ein Evidence-Objekt übergeben werden keine SecurityZone-Enum !!!

· new Evidence(Object[] hostEvidences,Object[] assemblyEvidences)

· Die Hostbeweise, aus denen die neue Instanz erstellt werden soll, · Die Assemblybeweise, aus denen die neue Instanz erstellt werden soll.

QUESTION 18
Certkiller.com has given you the task of creating medical billing application that will deal with various insurance vendors.
The appropriate assemblies have to be loaded and unloaded dynamically based on the patient's insurance provider.
All of these insurance assemblies are located in C:\Insurance Assemblies.
You have to ensure that when the new application first loads, it has to load all assemblies into a separate application domain.
You need to create the child application domain and load all assemblies it using the correct code.
What should you do?

A. Use the following code:
AppDomain domain = AppDomain.CreateDomain ("InsuranceDomain");
foreach (string assembly in Directory.GetFiles(@"C:\Insurance Assemblies", "*.dll"))
domain.LoadAssembly (assembly);

B. Use the following code:
AppDomain domain = AppDomain.CreateDomain ("InsuranceDomain");
foreach (string assembly in Directory.GetFiles(@"C:\Insurance Assemblies", "*.dll"))
domain.Load (assembly);

C. Use the following code:
AppDomain domain = AppDomain.CreateDomain ("InsuranceDomain");
foreach (string assembly in Directory.GetFiles(@"C:\Insurance Assemblies", "*.dll"))
domain.LoadFrom (assembly);

D. Use the following code:
AppDomain.CreateDomain ("InsuranceDomain", Directory.GetFiles (@"C:\Insurance Assemblies", "*.dll"))

Answer: B
Section: (none)

Explanation/Reference:
Explanation: First, the CreateDomain method of the AppDomain class is used to create an application named InsuranceDomain.
Then, the foreach construct is used to iterate through the C:\Insurance Assemblies directory
to retrieve the insurance assemblies in that location. The GetFiles method takes two String arguments, a directory path and a search string.
In this code, the GetFiles method will retrieve the names of all files in
C:\Insurance Assemblies that end in .dll.
the Load method of the AppDomain class is used to load each assembly into the current application domain.

Incorrect Answers:
A, C: The LoadAssembly and LoadFrom methods do not exist in the AppDomain class.
D: The CreateDomain method does not allow the loading of assemblies into the new domain.

· Load !!!

· Es gibt nur appDomainInstanz.Load(filename)

QUESTION 19
You are in the process of creating an application for Certkiller .com's Human Resources department that tracks employee benefits.
You have to store current employee data without recompiling the application.
You elect to store this employee data as a custom section in the application configuration file.
The relevant portion of the application configuration file is shown in the following exhibit:

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
<configSections>
</configSections>
<!-- Begin Custom Section -->
<EmployeeSection type="fulltime">
<Employee name="Rory Allen" />
</EmployeeSection>
<!-- End Custom Section -->
</configuration>
```

You want to use the .NET 2.0 Configuration API to access the custom section.

You need to ensure that programmatic access of the EmployeeSection element is enabled.
What should you do? (Choose two)

A. Create a custom section handler class that inherits the ConfigurationSection interface.
B. Add a section element to the EmployeeSection element of the application configuration file.
C. Create a custom section handler class that implements the IConfigurationSectionHandler interface.
D. Add an EmployeeSection element to the configSections element of the application configuration file.
E. Create a custom section handler class that implements the IApplicatioSettingsProvider interface.
F. Add a section element to the configSections element of the application configuration file.

Answer: AF
Section: (none)

Explanation/Reference:
Explanation: To enable programmatic access of the EmployeeSection element, you should create a custom section handler class that inherits the ConfigurationSection class and
add a section element to the configSections element of the application configuration file.

QUESTION 20
You are in the process of creating an application on Certkiller .com's Web sever named Certkiller -SR11.
This application will be used to manage confidential data from Certkiller.com's business partners.
The application relies on several assemblies located in Certkiller.com's intranet to fulfill its duties.
As a result, you have to verify that every assembly originates from the same intranet Web site.
How would you accomplish this?

A. Use the following code:
```
public bool CheckSite (){
SiteMembershipCondition site = new
SiteMembershipCondition("http//intranet.Certkiller.com");
return site.Check (AppDomain.CurrentDomain.Evidence);
}
```
B. Use the following code:
```
public bool CheckSite (){
Site site = new Site ("http//intranet.Certkiller.com");
return site.Check (Assembly.GetCallingAssembly().Evidence);
}
```
C. Use the following code:
```
public bool CheckSite (){
Site site = new Site ("http//intranet.Certkiller.com");
return site.Check (AppDomain.CurrentDomain.Evidence);
}
```
D. Use the following code:
```
public bool CheckSite (){
SiteMembershipCondition site = new
SiteMembershipCondition("http//intranet.Certkiller.com");
return site.Check (Assembly.GetCallingAssembly().Evidence);
}
```

Answer: D
Section: (none)

Explanation/Reference:
This code instantiates a SiteMembershipCondition object using the site's URL as a string, retrieves the evidence information from the current assembly, and verifies the evidence indicating the assembly originates from the company intranet. The SiteMembershipCondition class' sole purpose is to verify whether an assembly belongs to a site's

code group based upon the originating Web site of the application or assembly. The SiteMembershipCondition class has a constructor that takes a URL as a string argument. The Check method determines whether an assembly belongs to the site's code group based upon the evidence
provided as an argument.
The GetExecutingAssembly method of the Assembly class returns an Assembly object representing the assembly
that invoked the CheckPolicy method.
The Evidence property of the Assembly class returns the identity information used by the .NET Framework code access security mechanism to determine code group membership.

QUESTION 21
You need to create a dynamic assembly named MyAssembly.
You also need to save the assembly to disk.
Which code segment should you use?

A. AssemblyName myAssemblyName = new AssemblyName();
 myAssemblyName.Name = "MyAssembly";
 AssemblyBuilder myAssemblyBuilder = AppDomain.CurrentDomain.DefineDynamicAssembly
 (myAssemblyName, AssemblyBuilderAccess.Run);
 myAssemblyBuilder.Save("MyAssembly.dll");
B. AssemblyName myAssemblyName = new AssemblyName();
 myAssemblyName.Name = "MyAssembly";
 AssemblyBuilder myAssemblyBuilder = AppDomain.CurrentDomain.DefineDynamicAssembly
 (myAssemblyName, AssemblyBuilderAccess.Save);
 myAssemblyBuilder.Save("MyAssembly.dll");
C. AssemblyName myAssemblyName = new AssemblyName();
 AssemblyBuilder myAssemblyBuilder = AppDomain.CurrentDomain.DefineDynamicAssembly
 (myAssemblyName, AssemblyBuilderAccess.RunAndSave);
 myAssemblyBuilder.Save("MyAssembly.dll");
D. AssemblyName myAssemblyName = new AssemblyName();
 myAssemblyName.Name = ("MyAssembly");
 AssemblyBuilder myAssemblyBuilder = AppDomain.CurrentDomain.DefineDynamicAssembly
 (myAssemblyName, AssemblyBuilderAccess.Save);
 myAssemblyBuilder.Save("c:\\MyAssembly.dll");

Answer: B
Section: (none)

Explanation/Reference:
Explanation: Create an AssemblyName object and use it to construct an AssemblyBuilder with save privilege. Finally call the Save method on the AssemblyBuilder to write the assembly to disk.

A Creates an assembly that does not have the privilege to save to disk.

C does not provide a name the assembly

D attempts to define a physical file location, this is not compatible with AssemblyBuilder.Save

· Falsch:
· A AssemblyBuilderAccess.Run
· C Kein Name und AssemblyBuilderAccess.RunAndSave ?
· D "c:\\MyAssembly.dll"

QUESTION 22
You need to write a code segment that will create a common language runtime (CLR) unit of isolation within an

application.
Which code segment should you use?

A. AppDomainSetup mySetup = AppDomain.CurrentDomain.SetupInformation;
 mySetup.ShadowCopyFiles = "true";
B. System.Diagnostics.Process myProcess;
 myProcess = new System.Diagnostics.Process();
C. AppDomain domain;
 domain = AppDomain.CreateDomain("CertKillerDomain");
D. System.ComponentModel.Component my Component;
 myComponent = new System.ComponentModel.Component();

Answer: C
Section: (none)

Explanation/Reference:
Explanation: Create a new ApplicationDomain using the AppDomain.CreateDomain() method.

A ShadowCopyFiles property of AppDomainSetup controls whether shadow copying is enabled or disabled.

B the Process class is used to represent an existing process running on a computer.

D The ComponentModel.Component class is used for sharing components between applications.

· AppDomain.CreateDomain()

QUESTION 23
You have been asked by you superiors at Certkiller .com to create a child application domain.
The new child application domain has to specify a different assembly path than that of the parent application domain.
You need to ensure that your solution meets Certkiller.com's requirements.
What should you do?

A. Use the following code:
 AppDomainSetup domainSetup = new AppDomainSetup ();
 domainSetup.ApplicationName = @"C:\Program Files\ChildApp";
 AppDomain.CreateDomain ("ChildDomain", AppDomain.CurrentDomain.Evidence, domainSetup);
B. Use the following code:
 AppDomainSetup domainSetup = new AppDomainSetup ();
 domainSetup.ApplicationBase = @"C:\Program Files\ChildApp";
 AppDomain.CreateDomain ("ChildDomain", AppDomain.CurrentDomain.Evidence, domainSetup);
C. Use the following code:
 AppDomainSetup domainSetup = new AppDomainSetup ();
 domainSetup.ConfigurationFile = @"C:\Program Files\ChildApp";
 AppDomain.CreateDomain ("ChildDomain", AppDomain.CurrentDomain.Evidence, domainSetup);
D. Use the following code:
 AppDomainSetup domainSetup = new AppDomainSetup ();
 domainSetup.CachePath = @"C:\Program Files\ChildApp";
 AppDomain.CreateDomain ("ChildDomain", AppDomain.CurrentDomain.Evidence, domainSetup);

Answer: B
Section: (none)

Explanation/Reference:
Explanation: The CreateDomain method of the AppDomain class is an overloaded method that you can use to

create an application domain. This code creates a child application domain named ChildDomain, which uses the same evidence as its parent domain and specifies an AppDomainSetup object. In this version of CreateDomain, the first argument passed to the CreateDomain method is a String that represents the name of the application domain to be created.
The second argument of the CreateDomain method specifies an Evidence object. The Evidence object represents the identity information used for Code Access Security (CAS) in the Microsoft .NET Framework to determine the permissions granted to an assembly. The third argument of the CreateDomain method specifies an AppDomainSetup object. The AppDomainSetup object represents application domain settings such as the application name, base directory, and configuration file path. You have to specify a different assembly path than that of the parent application domain, so the ApplicationBase property of the AppDomain object has to be set. The ApplicationBase property defines the base directory of an application. Any runtime references will be resolved using this directory for assembly probing.

Incorrect Answers:
A: You should not use the code that sets the ApplicationName property of the AppDomainSetup object because this should be the friendly name of the application domain.
C: You should not use the code that sets the ConfigurationFile property of the AppDomainSetup object because this should be the directory where the configuration file is located.
D: You should not use the code that sets the CachePath property of the AppDomainSetup object

appDomainSetup.ApplicationBase = @"C:\Program Files\ChildApp";

ApplicationBase:
Ruft den Namen des Verzeichnisses ab, das die Anwendung enthält, oder legt diesen fest. Ein String, der den Namen des Basisverzeichnisses der Anwendung enthält. Das Anwendungsbasisverzeichnis ist das Verzeichnis, in dem der Assembly-Manager zuerst nach Assemblys sucht

QUESTION 24
You have recently created an application domain for Certkiller .com.
A few weeks later you are asked to retrieve information from this application domain, which is the current application domain.
What can you do to achieve this objective? (Choose two)

A. Use the following code:
 AppDomain appInfo = ApplicationDomain.Current;
B. Use the following code:
 AppDomain appInfo = AppDomain.CurrentDomain;
C. Use the following code:
 AppDomain appInfo = Thread.GetDomain();
D. Use the following code:
 AppDomain appInfo = MainThread.GetDomain();

Answer: BC
Section: (none)

Explanation/Reference:
Explanation: The CurrentDomain property of the AppDomain class is a read-only property that contains the application domain for the current thread. You can also use the GetDomain method of the Thread class to return the application domain for the thread that is currently running. Using either of these lines of code will return an AppDomain object for the currently running application from which you can retrieve information.

Incorrect Answers:
A, D: If you use any of these codes it will result in a syntax error because the .NET class libraries do not provide an ApplicationDomain or MainThread class.

· AppDomain.CurrentDomain-Eigenschaft
· Ruft die aktuelle Anwendungsdomäne für den aktuellen Thread ab (Fehler in Angabe - weil als Methode geschrieben)
· Thread.GetDomain() - Methode
· Gibt die aktuelle Domäne zurück, in der der aktuelle Thread ausgeführt wird.

· ACHTUNG die Klasse heisst AppDomain und nicht ApplicationDomain !!!

QUESTION 25
You have recently created an application domain for Certkiller .com.
A few weeks later, you are required to determine if assembly references in this application domain, which is the current application domain, are being cached.
What property should you use to achieve this objective?

A. AppDomain.CurrentDomain.ShadowCopyFiles
B. AppDomain.CurrentDomain.CachePath
C. AppDomain.CurrentDomain.ConfigurationFile
D. AppDomain.CurrentDomain.Evidence

Answer: A
Section: (none)

Explanation/Reference:
Explanation: The ShadowCopyFiles property of the AppDomain class contains a Boolean value that indicates whether assembly references are being cached or not.

Incorrect Answers:
B, C: These options are properties of the AppDomainSetup class.
D: This property is not used in caching.

· determine - ermitteln
· bool ShadowCopyFiles

QUESTION 26
You are required to dynamically load assemblies into an application domain.

You are using the Load method of the AppDomain class.
What types of files can you this use method for?

A. Library application files (.dll).
B. All assembly files, no matter what there file extensions are.
C. Application configuration files (.config).
D. Standalone application files (.exe).

Answer: B
Section: (none)

Explanation/Reference:
Explanation: An assembly specified in the Load method can use a valid extension, an invalid extension, or no extension at all.
As long as the Microsoft Intermediate Language (MSIL) code is valid, the extension is immaterial.

Incorrect Answers:
A, D: Although .dll and .exe are common extensions for .NET assemblies, they are not required when you use

the Load method of the AppDomain class.
C: You cannot use the Load method to load application configuration files (.config) because these have no MSIL code to execute and cannot be loaded into an application domain

· Extension spielt keine Rolle - gьltiger MSIL-Code !!!

QUESTION 27
You are currently creating a manifest-activated application on the Certkiller.com's intranet using ClickOnce deployment.
The network administrator informs you that each application has to identify its name, version, culture, and requested permissions.
You need to ensure that the application you are creating uses the command line to display the required information.
What should you do?

A. Use the following code:
 ApplicationSecurityInfo appInfo = new
 ApplicationSecurityInfo(appDomain.CurrentDomain);
 Console.Writeline (appInfo.ApplicationID.Name);
 Console.Writeline (appInfo.ApplicationID.Version);
 Console.Writeline (appInfo.ApplicationID.Culture);
 Console.Writeline (appInfo.DefaultRequestSet.ToXml ());
B. Use the following code:
 ApplicationSecurityInfo appInfo = ActivationContext.GetCurrentContext ();
 Console.Writeline (appInfo.ApplicationID.Name);
 Console.Writeline (appInfo.ApplicationID.Version);
 Console.Writeline (appInfo.ApplicationID.Culture);
 Console.Writeline (appInfo.DefaultRequestSet.ToXml ());
C. Use the following code:
 ApplicationSecurityInfo appInfo = new
 ApplicationSecurityInfo(appDomain.CurrentDomain.ActivationContext);
 Console.Writeline (appInfo.ApplicationID.Name);
 Console.Writeline (appInfo.ApplicationID.Version);
 Console.Writeline (appInfo.ApplicationID.Culture);
 Console.Writeline (appInfo.DefaultRequestSet.ToXml ());
D. Use the following code:
 ApplicationSecurityInfo appInfo = ActivationID.GetCurrentApplication ();
 Console.Writeline (appInfo.ApplicationID.Name);
 Console.Writeline (appInfo.ApplicationID.Version);
 Console.Writeline (appInfo.ApplicationID.Culture);
 Console.Writeline (appInfo.DefaultRequestSet.ToXml ());

Answer: C
Section: (none)

Explanation/Reference:
Answer C
The ApplicationSecurityInfo class represents the security evidence for a manifest-activated application.
The constructor requires an ActivationContext object that represents the manifest activation context of the application.
The AppDomain.CurrentDomain.ActivationContext property retrieves the activation context of the current manifest-activated application.
The DefaultRequestSet property represents the permission set the application is requesting of the local system.

Incorrect Answers:
A, B, D: You should not use the code fragments because they attempt the retrieve the ApplicationSecurityInfo

object through non-existent methods.

· new ApplicationSecurityInfo(appDomain.CurrentDomain.ActivationContext)

· ApplicationSecurityInfo benötigt im Konstruktor einen ActivationContext.

· Die Eigenschaft ActivationContext der aktuellen appDomain liefert diesen.

· appDomain.CurrentDomain.ActivationContext !!!

QUESTION 28
You have recently completed creating an application that uses an application configuration file.
This configuration file contains a section named EmployeeSection, which contains Employee elements.
You are required to view the contents of the EmployeeSection element.
You need to ensure that the EmployeeSection element outputs its contents to the console.
What should you do?

A. Use the following code:
 Configuration config = ConfigurationManager.OpenExeConfiguration(ConfigurationUserLevel.None);
 ConfigurationSection section = config.GetSection("EmployeeSection");
 Console.WriteLine(section.Contents);
B. Use the following code:
 ConfigurationSection section = Config.GetSection("EmployeeSection");
 Console.WriteLine(section.SectionInformation.GetRawXml ());
C. Use the following code:
 string section = ConfigurationSettings.AppSettings ["EmployeeSection"];
 Console.WriteLine(section);
D. Use the following code:
 Configuration config = ConfigurationManager.OpenExeConfiguration(ConfigurationUserLevel.None);
 ConfigurationSection section = config.GetSection ("EmployeeSection");
 Console.WriteLine(section.SectionInformation.GetRawXml ());

Answer: D
Section: (none)

Explanation/Reference:
Explanation: This code opens the application configuration file, retrieves the EmployeeSection element and outputs the contents as raw XML. The OpenExeConfiguration method takes a ConfigurationUserLevel enumeration value to indicate the visibility of the configuration settings. The value None means that the settings apply to all users. The OpenExeConfiguration method returns a Configuration object representing the current configuration settings. The GetSection method of the Configuration object can then be used to retrieve a specified section of the configuration file. The GetSection method accepts a section name and returns a ConfigurationSection object representing the specified section, if it is found. In this scenario, you pass the GetSection method the name of the EmployeeSection, and it returns a ConfigurationSection representing the EmployeeSection. You can then use this ConfigurationSection object to access information about the section of the configuration file. The SectionInformation property of the ConfigurationSection object retrieves section-specific settings, including contents. The GetRawWml method returns the XML content of the EmployeeSection. The WriteLine method then outputs the contents of the console.

Incorrect Answers:
A: You should not use the code that accesses the Contents property of the ConfigurationSection class because the ConfigurationSection class contains no such

· CongigurationManager UND GetRawXml
· ConfigurationManager wird benötigt.
· configurationSection.Context existiert nicht !!! - daher ist A falsch · configurationSection.SectionInfo stellt

Informationen und auch die Methode GetRawXml bereit

QUESTION 29
You have recently created and deployed an application using the .NET 1.1 CLR to all Certkiller.com users. After a Certkiller.com administrator updates all user computers with the .NET 2.0 CLR, you run preliminary tests and find that the application you created using the .NET 1.1 CLR is not compatible with the .NET 2.0 CLR. You need to ensure that the application can be run with the .NET 1.1 CLR.
What should you do?

A. Use the following element in the application configuration file:
<configuration>
<startup>
<bindingRedirect oldVersion="1.0.0.0" newVersion="1.1.0.0" />
</startup>
</configuration>
B. Use the following element in the application configuration file:
<configuration>
<startup>
<requiredRuntime version="v1.1.4322" safemode="true" />
</startup>
</configuration>
C. Use the following element in the application configuration file:
<configuration>
<startup>
<supportedRuntime version="v1.1.4322" />
<supportedRuntime version="v1.0.3705" />
</startup>
</configuration>
D. Use the following element in the application configuration file:
<configuration>
<startup>
<unsupportedRuntime version="v2.0.50727" />
</startup>
</configuration>

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This configuration element instructs the host system to launch the application using either .NET 1.1 CLR or .NET 1.0 CLR rather than defaulting to the .NET 2.0 CLR. The supportedRuntime element identifies the versions of the CLR with which the application can be run.
The supportedRuntime element is only supported in assemblies built using.NET 1.1 or later.

Incorrect Answers:
A: There is no such subelement as bindingRedirect that exists for the startup element.
B: The requiredRuntime element should only be used by assemblies built by using the .NET 1.0 Framework.
D: There is no such element as the unsupportedRuntime element that exists in the application configuration schema.

· Richtig:
· suportedRuntime - ab Version 1.1
· Falsch:
· requiredRuntime - NUR VERSION 1.0 !!!

QUESTION 30
You have recently created a business application that references another strong-named assembly named library.dll, and deployed it to all Certkiller.com users.
Subsequent to testing the applications performance, you elect to upgrade the assembly's version to 1.1.0.0.
You need to ensure that the new version of will not affect any of Certkiller.com's current users by adding the appropriate element to the assemblyBinding element in the application configuration file.
What element should you add?

A. <dependentAssembly>
<assemblyIdentity name="Library" publicKeyToken="32ab4bc45e90a1" culture="neutral" />
<redirect oldVersion="1.0.0.0" newVersion="1.1.0.0" />
</dependentAssembly>

B. <dependentAssembly>
<assemblyIdentity name="Library" publicKeyToken="32ab4bc45e90a1" culture="neutral" />
<bindingRedirect oldVersion="1.0.0.0" newVersion="1.1.0.0" />
</dependentAssembly>

C. <dependentAssembly>
<assemblyIdentity name="Library" publicKeyToken="32ab4bc45e90a1" culture="neutral"
oldVersion="1.0.0.0" newVersion="1.1.0.0" />
</dependentAssembly>

D. <dependentAssembly>
<bindingRedirect oldVersion="1.0.0.0" newVersion="1.1.0.0" />
</dependentAssembly>

Answer: B
Section: (none)

Explanation/Reference:
Explanation: This dependentAssembly element specifies the assembly identity information using the assemblyIdentity element.
The name attribute of the assemblyIdentity element indicates the common name of the assembly.
The publicKeyToken attribute specifies the strong-named key, and the culture attribute indicates the localization type.
The bindingRedirect element is a subelement of the dependentAssembly element that specifies the oldVersion and newVersion attributes.
Setting the oldVersion attribute to 1.0.0.0 and the newVersion attribute to 1.1.0.0 means that any users referencing the 1.0.0.0 version of the Library will now be referencing the 1.1.0.0 version.

Incorrect Answers:
A: You should not use the element that specifies the redirect element because there is no such subelement of the assemblyBinding element.
C: You should not use the element that specifies the assemblyIdentity element because this is required information when adding dependentAssembly elements.
D: You should not use the element that specifies the bindingRedirect element because there are no such attributes as oldVersion and newVersion attributes for the assemblyIdentity element.

· assemblyIdentity (publicKeyToken) und bindingRedirect (unbedingt beides) !!!

· redirect gibt es nicht !!!

QUESTION 31
You are currently in the process of creating a shared assembly.
You are required to perform many integration tests to make sure the assembly works properly with multiple applications.
You want to avoid constantly updating each application's reference when the assembly is updated.
You have set the DEVPATH environmental variable to the default build location for the shared assembly.

You need to ensure that the Common Language Runtime (CLR) uses DEVPATH to locate the shared assembly.
What should you do?

A. Add the following element to each application's application configuration file:
<dependentAssembly>
<assemblyIdentity name="SharedAssembly" />
<codeBase version="1.0.0.0" DEVPATH ="true" />
</ dependentAssembly >
B. Add the following element to the machine.config file in the development computer:
<dependentAssembly>
<assemblyIdentity name="SharedAssembly" />
<codeBase version="1.0.0.0" DEVPATH ="true" />
</ dependentAssembly >
C. Add the following element to each application's application configuration file:
<configuration>
<runtime>
<developmentMode developerInstallation="true" />
</runtime>
</configuration>
D. Add the following element to the machine.config file in the development computer:
<configuration>
<runtime>
<developmentMode developerInstallation="true" />
</runtime>
</configuration>

Answer: D
Section: (none)

Explanation/Reference:
Explanation: The developmentMode element instructs the CLR to use the DEVPATH environmental variable to locate assemblies.
If you do not add this element to the machine.config file, the DEVPATH environmental variable will be ignored.

Incorrect Answers:
A, C: Application configuration files are used for application-specific settings only
B: The codeBase element does not have a DEVPATH attribute.

· machine.config !!! NICHT für jede Applikation in application configuration !!! · <developmentMode developerInstallation="true" />

QUESTION 32
You are developing a method to hash data for later verification by using the MD5 algorithm.
The data is passed to your method as a byte array named message.
You need to compute the hash of the incoming parameter by using MD5.
You also need to place the result into a byte array.
Which code segment should you use?

A. HashAlgorithm algo = HashAlgorithm.Create("MD5");
byte[] hash = algo.ComputeHash(message);
B. HashAlgorithm algo = HashAlgorithm.Create("MD5");
byte[] hash = BitConverter.GetBytes(algo.GetHashCode());

C. HashAlgorithm algo;
algo = HashAlgorithm.Create(message.ToString());
byte[] hash = algo.Hash;

D. HashAlgorithm algo = HashAlgorithm.Create("MD5");
byte[] hash = null;
algo.TransformBlock(message, 0, message.Lenth, hash, 0);

Answer: A
Section: (none)

Explanation/Reference:
Explanation: Create a HashAlgorithm object based on the MD5 algorithm and call the ComputerHash method that will return the hash as an array of bytes.

B GetHashCode() will call the method inherited from object, it will not hash the message.

C The parameter of the Create method should specify the type of hashing algorithm to use not the message to be hashed.

D TransferBlock is more appropriate for hashing part of a message. Also it should be called with TransferEndBlock.

· Und wieder ComputeHash

QUESTION 33
You write the following code segment to call a function from the Win32 Application Programming Interface (API) by using platform invoke.
string personName = "N?el";
string msg = "welcome " + personName + "to club"!;
bool rc = User32API.MessageBox(0, msg, personName, 0); You need to define a method prototype that can best marshal the string data.
Which code segment should you use?

A. [DllImport("user32", CharSet = CharSet.Ansi)]
public static extern bool MessageBox(int h Wnd, String text,
String caption, unit type);

B. [DllImport("user32", EntryPoint = "MessageBoxA", CharSet = CharSet.Ansi)]
public static extern bool MessageBox(int hWnd, [MarshalAs(UnmanagedType.LPWStr)]String text,
[MarshalAs(UnmanagedType.LPWStr)]
String caption, unit type);

C. [DllImport("user32", CharSet = CharSet.Unicode)]
public static extern bool MessageBox(int h Wnd, String text, String caption, unit type);

D. [DllImport("user32", EntryPoint = "MessageBoxA", CharSet = CharSet.Unicode)]
public static extern bool MessageBox(int hWnd, [MarshalAs(UnmanagedType.LPWStr)]String text,
[MarshalAs(UnmanagedType.LPWStr)]
String caption,unit type);

Answer: C
Section: (none)

Explanation/Reference:
· Achtung: CharSet = CharSet.Unicode wird empfohlen, da in C# CharSet.Auto eventuell Probleme macht.

· CharSet.Ansi ist natürlich fasch (string in C# ist Unicode)

QUESTION 34
You need to create a class definition that is interoperable along with COM.
You need to ensure that COM applications can create instances of the class and can call the GetAddress method.
Which code segment should you use?

A.
```
public class Customer {
string addressString;
public Customer(string address) {
addressString = address;
}
public string GetAddress() {
return addressString;
}
}
```
B.
```
public class Customer {
static string addressString;
public Customer() { }
public static string GetAddress() {
return addressString;
}
}
```
C.
```
public class Customer {
string addressString;
public Customer() { }
public string GetAddress() {
return addressString;
}
}
```
D.
```
public class Customer {
string addressString;
public Customer() { }
internal string GetAddress() {
return addressString;
}
}
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: The class should be declared with a parameter less constructor and the getAddress() method should be public.

A uses a constructor with Parameters.

B uses static members that are not supported in COM

D the method GetAddress() must be public to be accessible by COM.

· Achtung Fehler im Orginal (C steht static statt string !!!)

QUESTION 35
You write the following code to call a function from the Win32 Application Programming Interface (API) by using platform invoke.
int rc = MessageBox(hWnd, text, caption, type);

You need to define a method prototype. Which code segment should you use?

A. [DllImport("user32")]
public static extern int MessageBox(int hWnd, String text, String caption, unit type);
B. [DllImport("user32")]
public static extern int MessageBoxA(int hWnd, String text,String caption, unit type);
C. [DllImport("user32")]
public static extern int Win32API_User32_MessageBox(int h wnd, String text, String caption, unit type);
D. [DllImport(@"C:\WINDOWS\system32\user32.dll")]
public static extern int MessageBox(int hWnd, String text, String caption, unit type);

Answer: A
Section: (none)

Explanation/Reference:
Explanation: Mark the prototype with the Dllimport attribute specifying the library\dll that the function resides in.

B creates a prototype for the MessageBoxA function not MessageBox .

C it is not necessary to specify the physical path because user32.dll will be in the path environment variable. Also it will not work with versions of windows (some may use c:\winnt\system32)

QUESTION 36
You create an application to send a message by e-mail. An SMTP server is available on the local subnet. The SMTP server is named smtp. Certkiller .com.
To test the application, you use a source address, me@Certkiller .com, and a target address, you@Certkiller . com.
You need to transmit the e-mail message.
Which code segment should you use

A. MailAddress addrFrom = new MailAddress("me@certkiller.com","Me");
MailAddress addrTo = new MailAddress("you@certkiller.com","You");
MailMessage message = new MailMessage(addrFrom, addrTo);
message.Subject = "Greeting!";
message.Body = "Test";
message.Dispose();
B. string strSmtpClient = smtp.certkiller.com";
string strFrom = "me@certkiller.com";
string strTo = "you@certkiller.com";
String strSubject = "Greetings!";
String strBody = "Test";
MailMessage msg = new MailMessage(strFrom, strTo, strSubject, strSmtpClient);
C. MailAddress addrFrom, = new MailAddress("me@certkiller.com");
MailAddress addrTo, = new MailAddress("you@certkiller.com");
MailAddress message = new MailMessage(addrFrom,addrTo);
message.Subject = "Greeting!";
message.Body = "Test";
SmtpClient client = new SmtpClient("smtp.certkiller.com");
client.Send(message);

D. MailAddress addrFrom = new MailAdress("me@certkiller.com","Me");
MailAddress addrTo = new MailAddress("you@certkiller.com","You");
MailMessage message = new MailMessage(addrFrom,addrTo);
message.Subject = "Greeting!";
message.Body = "Test";
SocketInformation info = new SocketInformation();
Socket client = new Socket(info);
System.Text.ASCIIEncoding enc = new System.Test.ASCIIENcoding();
byte[] msgBytes = enc.GetBytes(message. ToString());
client.Send(msgBytes);

Answer: C
Section: (none)

Explanation/Reference:
Explanation: To Send a simple mail message construct a MailMessage object and a SmptClient object.
Call the SmtpClient.Send instance method supplying the MailMessage object as a parameter.

A creates a MailMessage but then destroys it.

B creates a MailMessage but then does not do anything with it.

D tries to do something with sockets, this is unnecessary because there is a SMTP server available. The question implies delivering the mail via SMTP.

QUESTION 37
You are developing a .NET Framework 2.0 enterprise application on Certkiller -WS552.
The application will be used to allow the users to send e-mail messages and should allow users to send HTML-based e-mails,
but the users should not be able to use the HTML tag to embed images in the HTML document.
The images are not externally hosted so instead the images must be sent as part of the e-mail message.
You are required to select which class to use.
What should you do?

A. The AlternateView class should be used.
B. The Attachment class should be used.
C. The MailAddress class should be used.
D. The LinkedResource class should be used.

Answer: D
Section: (none)

Explanation/Reference:
In the scenario you should make use of the LinkedResource class as it is used to embed external resources in an e-mail attachment such as images in an HTML attachment.

Incorrect Answers:
A: The class in question could be used in the scenario but the AlternateView class itself cannot be used to embed images in the HTML document.

B: The Attachment class should not be used in the scenario as the class only allows you to send images as an attachment.

C: The usage of this class is incorrect as it is used to store the address information for e-mail messages in the scenario.

· LinkedResource (embed external resources in an e-mail attachment such as images in an HTML attachment)

QUESTION 38
Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS536 as your development computer.
You are developing a .NET Framework 2.0 application on Certkiller -WS536.
The application will be used to list the available public types and methods in the Certkiller.com assembly.
You named the assembly strongly and it is installed in the global assembly cache (GAL) and an assembly with the same identity is stored at c:\ Certkiller \assemb\ Certkiller.com.dll.

You are required to dynamically load the Certkiller.com assembly into your application whilst you ensure that the assembly is loaded from c:\ Certkiller \assemb\ Certkiller .com.dll rather than the global assembly cache (GAL).
What should you do?

A. Assembly assemb = Assembly.LoadFrom("c:\Certkiller\assemb\Certkiller.com.dll");
B. Assembly assemb = Assembly.LoadFile("c:\Certkiller\assemb\Certkiller.com.dll");
C. Assembly assemb = Assembly.ReflectionOnlyLoad("Certkiller.com");
D. Assembly assemb = Assembly.Load("Certkiller .com");
E. Assembly assemb = Assembly.ReflectionOnlyLoadFrom("c:\Certkiller\assemb\Certkiller.com.dll");

Answer: E
Section: (none)

Explanation/Reference:
To correctly load the Assembly class from the location c:\ Certkiller \assemb\ Certkiller .com.dll you should make used of the
method used in the option of the scenario.

Incorrect Answers:
A, B, C, D: The other methods of the assembly class will request the common language runtime (CLR) to resolve the location of the assembly based on its identity therefore these options should not be used in the scenario even though you provide the full absolute path as a parameter.

· ACHTUNG auf Angabe: ...The application will be used to list the available public types and methods ...
· Daher Assembly.ReflectionOnlyLoadFrom (da der Dateiname angegeben ist - nicht ReflectionOnlyLoad)

· ReflectionOnlyLoadFrom und ReflectionOnlyLoad
· Lädt eine Assembly in den ReflectionOnly-Kontext, wo sie überprüft, aber nicht ausgeführt werden kann.

QUESTION 39
You are writing code for user authentication and authorization.
The username, password, and roles are stored in your application data store.
You need to establish a user security context that will be used for authorization checks such as IsInRole.
You write the following code segment to authorize the user.

```
if (!TestPassword(userName, password))
throw new Exception("could not authenticate user");
String[] userRolesArray = LookupUserRoles(userName);
```

A. GenericIdentity ident = new GenericIdentity(UserName);
 GenericPrincipal currentUser = new GenericPrincipal(ident, userRolesArray);
 Thread.CurrentPrincipal = currentUser;

B. WindowsIdentity ident = new WindowsIdentity(userName);
WindowsPrincipIal currentUser = new WindowsPrincipIal(ident);
Thread.CurrentPrincipal = currentUser;

C. NTAccount userNTName = new NTAccount(userName);
GenericIdentity ident = new GenericIdentity(userNTNmae.Value);
GenericPrincipal currentUser= new GenericPrincipal(ident, userRolesArray);
Thread.CurrentPrincipal = currentUser;

D. Intptr token = IntPtr.Zero;
token = LogonUserUsingInterop(userNmae, encryptedPassword);
WindowsImpersonationContext ctx = WindowsIdentity.Impersonate(token);

Answer: A
Section: (none)

Explanation/Reference:
Explanation: Because the application storing the credentials, the GenericIdentity & GenericPrincipal classes should be used instead of the WindowsIdentity\Pricipal classes.

B uses WindowsIdentity & WindowsPrincipal

C incorrectly uses NTAccount to initialise a GenericPrincipal. GenericPrincipal requires an implementation of IIdentity.

D the WindowsIdentity.Impersonate() is used for running code in the context of another user. Impersonation is not what is required.

· application storing the credentials !!!

QUESTION 40
You are loading a new assembly into an application.
You need to override the default evidence for the assembly.
You require the common language runtime (CLR) to grant the assembly a permission set, as if the assembly were loaded from the local intranet zone.
You need to build the evidence collection.
Which code segment should you use?

A. Evidence evidence = new Evidence(Assembly.GetExecutingAssembly().Evidence);

B. Evidence evidence = new Evidence();
evidence.AddAssembly(new Zone(SecurityZone.Intranet));

C. Evidence evidence = new Evidence();
evidence.AddHost(new Zone(SecurityZone.Intranet));

D. Evidence evidence = new Evidence(AppDomain.CurrentDomain.Evidence);

Answer: C
Section: (none)

Explanation/Reference:
Explanation: Use the evidence.AddHost method to add Zone evidence.

A simply gets the evidence of the Executing Assembly and assigns it to a new object, the question explicitly wants Intranet zone evidence.

B Adds assembly evidence, the question asks for host evidence because it is concerned with where the assembly was loaded from.

D does not create an Evidence object with Intranet zone evidence.

· AddHost !!!
· the assembly were loaded from !!!

QUESTION 41
You are developing a class library that will open the network socket connections to computers on the network.
You will deploy the class library to the global assembly cache and grant it full trust.
You write the following code to ensure usage of the socket connections.

SocketPermission permission = new SocketPermission(PermissionState.Unrestricted); permission.Assert();

Some of the applications that use the class library might not have the necessary permissions to open the network socket connections.
You need to cancel the assertion.

A. CodeAccessPermission.RevertAssert();
B. CodeAccessPermission.RevertDeny();
C. Permission.Deny();
D. Permission.PermitDeny();

Answer: A
Section: (none)

Explanation/Reference:
Explanation: CodeAccessPermission.RevertAssert() should be used to undo a previous Assert call.

B is used to revert a previous deny call.

C & D are used to reduce the CAS permissions, they do not undo a previous Assert call.

· Revert...

QUESTION 42
You are developing a method to decrypt data that was encrypted with the TripleDESAlgorithm. <
The method accepts the following parameters:
The byte array to be decrypted, which is named cipherMessage The key, which is named key
An initialization vector, which is named iv
You need to decrypt the message by using the TripleDES class and place the result in a string.
Which code segment should you use?

A. TripleDES des = new TripleDESCryptoServiceProvider();
des.**BlockSize** = cipherMessage.Length;
ICryptoTransForm crypto = des.CreateEncryptor(Key, iv);
MemoryStream cipherStream = new MemoryStream(cipherMessage);
CryptoStream cryptoStream = new CryptoStream(cipherStream, crypto, CryptoStreamMode.Read);
string message;
message = new StreamReader(cryptoStreamMode).ReadToEnd();

B. TripleDES des = new TripleDESCryptoServiceProvider();
des.**FeedbackSize** = cipherMessage.Length;
ICryptoTransForm crypto = des.CreateDecryptor(Key, iv);
MemoryStream cipherStream = new MemoryStream(cipherMessage);
CryptoStream cryptoStream = new CryptoStream(cipherStream, crypto, CryptoStreamMode.Read);
string message;
message = new StreamReader(cryptoStream).ReadToEnd();

C. TripleDES des = new TripleDESCryptoServiceProvider();
ICryptoTransForm crypto = des.CreateDecryptor();
MemoryStream cipherStream = new MemoryStream(cipherMessage);
CryptoStream cryptoStream = new CryptoStream(cipherStream, crypto, CryptoStreamMode.Read);
string message;
message = new StreamReader(cryptoStream).ReadToEnd();

D. TripleDES des = new TripleDESCryptoServiceProvider();
ICryptoTransForm crypto = des.CreateDecryptor(Key, iv);
MemoryStream cipherStream = new MemoryStream(cipherMessage);
CryptoStream cryptoStream = new CryptoStream(cipherStream, crypto, CryptoStreamMode.Read);
string message;
message = new StreamReader(cryptoStream).ReadToEnd();

Answer: D
Section: (none)

Explanation/Reference:
D wäre richtig mit ...CreateDecryptor im Orginal steht CreateEncryptor
Frage 56 D wäre richtig mit ...CreateDecryptor (sonst B ? .FeedbackSize falsch angegeben ?)
1. Zeile überall gleich und richtig TripleDES des = new TripleDESCryptoServiceProvider();
2. BlockSize bzw. FeedbackSize (SymmetricAlgorithm) FALSCH da in BIT !!! (müssen NICHT angegeben werden(A,B))?
3. Umwandler erstellen: ICryptoTransForm crypto = des.CreateDecryptor(Key, iv); Achtung (A und D falsch) des.CreateEncryptor (wir wollen aber entschlüsseln) !!!
4. Stream zum Lesen der ByteArray - überall richtig: MemoryStream cipherStream = new MemoryStream (cipherMessage);
5. CryptoStream auf Basis des MemoryStreams erstellen (Überall richtig): CryptoStream cryptoStream = new CryptoStream(cipherStream, crypto, CryptoStreamMode.Read);
6. String für Ergebnis erstellen message = new StreamReader(cryptoStream).ReadToEnd();

Tippfehler in (A - falsch): ... new StreamReader(cryptoStreamMode)...

QUESTION 43
You are developing an application that will use custom authentication and role-based security.
You need to write a code segment to make the runtime assign an unauthenticated principal object to each running thread.
Which code segment should you use?

A. AppDomain domain = AppDomain.CurrentDomain;
domain.SetPrincipalPolicy(PrincipalPolicy.WindowsPrincipal);

B. AppDomain domain = AppDomain.CurrentDomain;
domain.SetThreadPrincipal(new WindowsPrincipal(null));

C. AppDomain domain = AppDomain.CurrentDomain;
domain.SetAppDomainPolicy(PolicyLevel.CreateAppDomainLevel());

D. AppDomain domain = AppDomain.CurrentDomain;
domain.SetPrincipalPolicy(PrincipalPolicy.UnauthenticatedPrincipal);

Answer: D

Section: (none)

Explanation/Reference:
Explanation: Setting the PrincipalPolicy for the AppDomain to UnauthenticatedPrincipal will default the Principal for each thread to an unauthenticated principal .

A sets the policy to WindowsPrincipal, threads will have their principal set according the windows account that they are running as.

B SetThreadPrincipal() does not set the default policy for all new threads. Also a WindowsPrincipal is used instead of UnauthenticatedPrincipal.

C SetAppDomainPolicy is used to set the security policy level for the domain.

· Die Frage ist die Antwort:
· ...assign an unauthenticated principal object ... :
PrincipalPolicy.UnauthenticatedPrincipal

QUESTION 44
Certkiller .com has asked you to create an application that copies file content from one file on a client computer named Certkiller -WS007 to a new file on a server named Certkiller -SR15. The method displayed in the following exhibit is included in the new application:
You have to ensure that the application copies all permissions on the original file to the new file.
You should also make sure that the new file does not inherit its permissions from the destination directory on Certkiller -SR15.
What should you do?

A. Add the following code to the Copy method:
 file2.SetAccessControl(file1.GetAccessControl());
B. Add the following code to the Copy method:
 FileSecurity acl = file1.GetAccessControl();
 acl.SetAccessRuleProtection(true, true);
 file2.SetAccessControl (acl);
C. Add the following code to the Copy method:
 file2.SetAccessControl(file1.GetAccessControl(), false);
D. Add the following code to the Copy method:
 FileSecurity acl = file1.GetAccessControl();
 acl.SetAccessRuleProtection(true, false);
 file2.SetAccessControl (acl);

Answer: B
Section: (none)

Explanation/Reference:
This code retrieves the FileSecurity object from the original file, copies and protects the ACL settings from directory inheritance, and copies the ACL settings to the destination file. The GetAccessControl method returns a FileSecurity object representing the ACL of the original file.
The SetAccessRuleProtection method sets or removes ACL protection from the parent objects through inheritance.
The SetAccessRuleProtection method accepts two Boolean arguments, the first of which indicates whether settings are protected from inheritance, and the second of which indicates whether to preserve the existing inherited access rule. In this scenario, the value true for both arguments indicates that the ACL is protected from inheritance,
but the current ACL settings are copied.
The SetAccessControl method takes a FileSecurity object and applies the ACL to the destination folder.

Incorrect Answers:
A, C: You should not use the code fragments that do not invoke the SetAccessRuleProtection method because this will not protect the destination file's ACL settings from inheritance.

D: This code will protect the ACL from inheritance, but it does not copy the existing inherited ACL settings.
· fileSecurity.SetAccessRuleProtection(true,true) !!!

QUESTION 45
Certkiller .com has been contracted by the local hospital to create an application that forwards private patient information to various insurance providers.
The hospital informs you that the amount and frequency of the patient data is high.
You need to ensure that data confidentiality is guaranteed, with as little overhead as possible.
You now need to encrypt the patient information.
What should you do?

A. Use the following code:
```
public byte [] EncryptData(byte [] PatientInfo, RSACryptoServiceProvider SecretKey){
CryptoSream cs = new CryptoSream(SecretKey);
cs.Encrypt (PatientInfo, 0, PatientInfo.Length);
byte [] data = cs.ToArray ();
cs.Close ();
return data;
}
```
B. Use the following code:
```
public byte [] EncryptData(byte [] PatientInfo, RSACryptoServiceProvider SecretKey)
MemorySream ms = new MemorySream ();
CryptoSream cs = new CryptoSream(ms,
SecretKey.CreateEncryptor(),CryptoSreamMode.Write);
cs.Write (PatientInfo, 0, PatientInfo.Length);
cs.Close ();
byte [] data = ms.ToArray ();
ms.Close ();
return data;
}
```
C. Use the following code:
```
public byte [] EncryptData(byte [] PatientInfo, DESCryptoServiceProvider SecretKey){
CryptoSream cs = new CryptoSream(SecretKey);
cs.Encrypt(PatientInfo, 0, PatientInfo.Length);
byte [] data = cs.ToArray ();
cs.Close ();
return data;
}
```
D. Use the following code:
```
public byte [] EncryptData (byte [] PatientInfo, DESCryptoServiceProvider SecretKey){
MemorySream ms = new MemorySream ();
CryptoSream cs = new CryptoSream(ms, SecretKey.CreateEncryptor(), CryptoSreamMode.Write);
cs.Write(PatientInfo, 0, PatientInfo.Length);
cs.Close();
byte [] data = ms.ToArray();
ms.Close ();
return data;
}
```

Answer: D
Section: (none)

Explanation/Reference:
This code instantiates a CryptoStream object, specifies the ICryptoTransform object to encrypt data, encrypts the PatientInfo byte array, and returns the encrypted byte array. The DESCryptoServiceProvider class represents a managed cryptographic provider of the DataEncryption Standard (DES) symmetric algorithm.
The DES symmetric algorithm is commonly used for dat confidentiality, and it supports 64- bit keys.
When you instantiate a DESCryptoServiceProvider object, a secret key for encryption and an initialization vector (IV) are created.
Because the same key and IV are needed for encryption and decryption, the CreateEncryptor and CreateDecryptor methods generate the appropriate ICryptoTransform object to alter the data.

Incorrect Answers
A, B: You should not use the code fragments that specify the RSACryptoServiceProvider because this implements an asymmetric algorithm.

C: You should not use the code fragments that invoke the Encrypt method because no such method exists in the CryptoSream class.

· DESCryptoServiceProvider verwenden (64-bit symetrische Verschlüsselung) · RSA ist asymetrisch - Aufwand !!!
· Write-Methode gibt es - Encrypt-Methode NICHT !!!

· Ausserdem einziger Konstruktor von CryptoStream:
· public CryptoStream (Stream stream, ICryptoTransform transform, CryptoStreamMode mode)
· transform: Die kryptografische Transformation, die für den Stream ausgeführt werden soll. (SecretKey. CreateEncryptor())

· die verschiedenen XXXCryptoServiceProvider haben alle eine Methode CreateEncryptor bzw. CreateDecryptor.

QUESTION 46
Certkiller .com has been contracted by the local hospital to create an application that forwards private patient information to various insurance providers.
The patient information is sent via a secured VPN to ensure confidentiality.
You also need to guarantee data integrity, and verify that the patient data originated from the local hospital.
To achieve this objective, you elect to utilize asymmetric encryption and a digital signature technology.
What code would you use to complete your task?

A.
```
public byte [] SignAndHash(byte [] PatientInfo, RSAParameters RSAInfo){
RSACryptoServiceProvider RSAProvider = new RSACryptoServiceProvider ();
RSAProvider.ImportParameters(RSAInfo);
Return RSAProvider.Encrypt(PatientInfo, true);
}
```
B.
```
public byte [] SignAndHash(byte [] PatientInfo, DSAParameters DSAInfo){
DSACryptoServiceProvider DSAProvider = new DSACryptoServiceProvider();
DSAProvider.ImportParameters(DSAInfo);
Return DSAProvider.SignHash(PatientInfo);
}
```
C.
```
public byte [] SignAndHash(byte [] PatientInfo, RSAParameters RSAInfo){
RSACryptoServiceProvider RSAProvider = new RSACryptoServiceProvider();
RSAProvider.ImportParameters(RSAInfo);
Return RSAProvider.SignEncrypt(PatientInfo, true);
}
```

D. public byte [] SignAndHash(byte [] PatientInfo, DSAParameters DSAInfo){
DSACryptoServiceProvider DSAProvider = new DSACryptoServiceProvider();
DSAProvider.ImportParameters(DSAInfo);
Return DSAProvider.SignData(PatientInfo);
}

Answer: D
Section: (none)

Explanation/Reference:
The DSACryptoServiceProvider class represents a managed cryptographic provider of the Digital Signature Algorithm (DSA) asymmetric algorithm. The DSA asymmetric algorithm is commonly used for digital signatures and data integrity, supporting 1024 bit keys.
When instantiating a DSACryptoServiceProvider object, a public/private key pair is generated and a default hash is assigned.
Thus, to use a particular private key to sign data, a public key to verify data, or a particular hash, you must invoke the ImportParemeters method for the current DSACryptoServiceProvider to load custom settings.
The SignData method takes a byte array representing the original data and returns the hashed and then signed byte array.

Incorrect Answers:
A, C: You should not use the code fragments that specify the RSACryptoServiceProvider object because the method invocations are incorrect.
B: The SignHash method is used to sign a message digest, not the original data.

· DSA !!!
· SignData (nachdem mit ImportParameter für public Key bzw. hash)

QUESTION 47
A fellow developer named Andy Booth has recently created an application.
The application receives confidential transaction data from Certkiller .com's clients, which it secures using the TripleDESCryptoServiceProvider class.
You are currently reviewing this application, and need to decrypt a byte array of cipher text.
What code should you use to achieve this objective?

A. public byte [] DecryptData(byte [] cipherText, TripleDESCryptoServiceProvider secretKey){
MemorySream ms = new MemorySream(cipherText);
CryptoSream cs = new CryptoSream(ms, SecretKey, CryptoSreamMode.Read);
byte [] data = new byte [ms.Length - 1];
cs.Read (data, 0, data.Length);
cs.Close ();
ms.Close ();
return data;
}
B. public byte [] DecryptData(byte [] cipherText, TripleDESCryptoServiceProvider secretKey){
MemorySream ms = new MemorySream (cipherText);
CryptoSream cs = new CryptoSream(ms, secretKey.CreateDecryptor(), CryptoSreamMode.Read);
byte [] data = new byte [ms.Length - 1];
cs.Read (data, 0, data.Length);
cs.Close ();
ms.Close ();
return data;
}

C. public byte [] DecryptData(byte [] cipherText, TripleDESCryptoServiceProvider secretKey){
MemorySream ms = new MemorySream (secretKey);
CryptoSream cs = new CryptoSream(ms, secretKey.CreateDecryptor(), CryptoSreamMode.Read);
byte [] data = ms.Decrypt (cipherText);
cs.Read (data, 0, data.Length);
ms.Close ();
return data;
}

D. public byte [] DecryptData(byte [] cipherText, TripleDESCryptoServiceProvider secretKey){
CryptoSream cs = new CryptoSream (secretKey);
byte [] data = ms.Decrypt (cipherText);
cs.Read (data, 0, data.Length);
ms.Close ();
return data;
}

Answer: B
Section: (none)

Explanation/Reference:
This code instantiates a CryptoStream object, specifies the ICryptoTransform object to encrypt data, decrypts the CipherText byte array,
and returns the encrypted byte array.
The TripleDESCryptoServiceProvider class represents a managed cryptographic provider of the Data Encryption Standard (DES) symmetric algorithm.
The DES symmetric algorithm is commonly used for dat confidentiality, and it supports 64- bit keys.
When you instantiate a TripleDESCryptoServiceProvider object, a secret key for encryption and an initialization vector (IV) are created.
Because the same key and IV are needed for encryption and decryption, the CreateEncryptor and CreateDecryptor methods
generate the appropriate ICryptoTransform object to alter the data.

Incorrect Answers:
A: You should not use the code that does not invoke the CreatDecryptor method because this is required when instantiating a CryptoStream object.
C, D: You should not use the code fragments that invoke the Decrypt method because no such method exists in the CryptoStream class.

· Tipp:
· CryptoSream cs = new CryptoSream(ms, secretKey.CreateDecryptor(), CryptoSreamMode.Read);
· ist der einzige korrekte Konstruktor (C wurde ausgebessert).

· Methode Read und nicht Decrypt - schon gar nicht von MemoryStream !!!

· public CryptoStream (Stream stream, ICryptoTransform transform, CryptoStreamMode mode)
· transform: Die kryptografische Transformation, die für den Stream ausgeführt werden soll. (SecretKey. CreateEncryptor())

· die verschiedenen XXXCryptoServiceProvider haben alle eine Methode CreateEncryptor bzw. CreateDecryptor.

QUESTION 48
Certkiller.com has a file server named Certkiller-SR07 that hosts company data.
You are currently in the process of creating an application that will be used by Certkiller.com users to manage the data on Certkiller-SR07.
To ensure that Certkiller.com users have the appropriate file permissions on the working directory, you define the DemanDirectorySecurity method as shown below.

```
public void DemanDirectorySecurity (string path) {
FileIOPermission filePerm = new FileIOPermission (PermissionState.None);
filePerm.AddPathList (FileIOPermissionAccess.AllAccess, path); filePerm.Assert ();
}
```

Subsequent to installing the new application, you find that some users do not have full access to their working directories.
You are informed that these Certkiller.com users only require read only access.
You are required to override the permission assertion in the DemanDirectorySecurity method for these users only.
What should you do?

A. Use the following code:
```
FileIOPermission.RevertAssert();
FileIOPermission fileOVPerm = new FileIOPermission (PermissionState.None);
fileOVPerm.AddPathList (FileIOPermissionAccess.Read, path);
fileOVPerm.Assert ();
```
B. Use the following code:
```
FileIOPermission fileOVPerm = new FileIOPermission (PermissionState.None);
fileOVPerm.AddPathList (FileIOPermissionAccess.Read, path);
fileOVPerm.Permit();
```
C. Use the following code:
```
FileIOPermission.Revoke();
FileIOPermission fileOVPerm = new FileIOPermission (PermissionState.None);
fileOVPerm.AddPathList (FileIOPermissionAccess.Read, path);
fileOVPerm.Assert();
```
D. Use the following code:
```
FileIOPermission fileOVPerm = new FileIOPermission (PermissionState.None);
fileOVPerm.AddPathList (FileIOPermissionAccess.Read, path);
fileOVPerm.OverrideAll();
```

Answer: A
Section: (none)

Explanation/Reference:
This code invokes the Revert Assert method on the FileIOPermission class, instantiates a FileIOPermission object representing read-only access to the working directory, and invokes the assert method on the FileIOPermission object.

B, C, D: The Permit, OverrideAll, and Revoke methods do not exist in the FileIOPermission class.

· FileIOPermission.RevertAssert
· Veranlasst, dass ein vorhergehendes Assert für den aktuellen Rahmen entfernt wird und nicht mehr wirksam ist.
· (Von CodeAccessPermission geerbt.)
· FileIOPermission hat kein Permit, OverrideAll, Revoke · Fehler in Angabe - es heisst RevertAssert und nicht Revert !!!

QUESTION 49
You are in the process of creating an application that will be used to forward confidential information to Certkiller.com's business partners.
In a bid to improve the security of your production environment, you install digital certificates for publishing all assemblies in the application.
You need to confirm that every assembly belongs to the same publisher, based on that publisher's digital certificate.

You are asked to confirm that the current assembly belongs to a certain publisher.
What should you do?

A. Use the following code:
public bool CheckPolicy (X509Certificate cert){
PublisherMembershipCondition policy = new PublisherMembershipCondition(cert);
return policy.**Check**(**Assembly.GetCallAssembly().Evidence**);
}
B. Use the following code:
public bool CheckPolicy (X509Certificate cert){
Publisher pub = new Publisher(cert);
return pub.**Verify**(**AppDomain.CurrentDomain.Evidence**);
}
C. Use the following code:
public bool CheckPolicy (X509Certificate cert){
Publisher pub = new Publisher(cert);
return pub.**Check**(**appDomain.CurrentDomain.Evidence**);
}
D. Use the following code:
public bool CheckPolicy (X509Certificate cert){
PublisherMembershipCondition policy = new PublisherMembershipCondition (cert);
return policy.**Verify**(**Assembly.GetCallAssembly().Evidence**);
}

Answer: A
Section: (none)

Explanation/Reference:
Incorrect Answers:
B, C: You should not use the code fragments that specify the AppDomain.CurrentDomain.Evidence property as an argument , because this property retrieves only the evidence available to the current application domain.

D: You should not use this code fragment that specifies the Verify method because this method does not exist in the PublisherMembershipCondition class

.
XXXMembershipCondition und Methode
xxxMembershipCondition.Check(assembly.Evidence)
.
PublisherMembershipCondition und Check
.
PublisherMembershipCondition policy = new PublisherMembershipCondition (cert);
.
return policy.Check (Assembly.GetCallAssembly().Evidence); ·
ACHTUNG eine Anwendung kann mehrere AppDomain haben !!!

QUESTION 50
You are in the process of creating an application that will display confidential employee information.
When your manager informs you that only managers and administrators should be able to view the information, you utilize windows authentication and .NET role-based security to guarantee this.
The network administrator in your department informs you that he has noticed that there are certain users that are not managers or administrators are able to view the employee information.
You immediately analyze your code, and discover an issue with domain group memberships.
The network administrator asks you to trace the user account and security identifier (SID) of each user in the application
so that he can use this information to detect users across the enterprise and verify that their group

memberships are correct.

How would you do this?

A. Use the following code:
```
WindowsIdentity curID = WindowsIdentity.GetCurrent ();
NTAccount account = new NTAccount (curID.Name);
SecurityIdentifier sid = (SecurityIdentifier)account.Translate(typeof (SecurityIdentifier));
Trace.Write ("User's SID is" + sid.Value, "User" + account.Value);
```
B. Use the following code:
```
WindowsIdentity curID = WindowsIdentity.GetCurrent ();
NTAccount account = new NTAccount (curID.Name);
Trace.Write ("User's SID is" + sid.Value, "User" + account.Value);
```
C. Use the following code:
```
WindowsIdentity curID = WindowsIdentity.GetCurrent ();
Trace.Write ("User's SID is" + curID.Value, "User" + sid.Name);
```
D. Use the following code:
```
WindowsIdentity curID = WindowsIdentity.GetCurrent ();
SecurityIdentifier sid = new SecurityIdentifier (curID.Name);
Trace.Write ("User's SID is" + curID.Value, "User" + sid.Name);
```

Answer: A
Section: (none)

Explanation/Reference:
This code retrieves the current WindowsIdentity object associated with the user, instantiates an NTAccount object
using the Name property, invokes the Translate method to retrieve the current SecurityIdentifier object, and invokes the Write method on the Trace class to record the Value property of both the SecurityIdentifier and NTAccount objects.
The GetCurrent method of the WindowsIdentity object represents the identity of the application user.
The NTAccount class represents a Windows user group account in the local Security Accounts Manager (SAM) or in the Active Directory domain.
The constructor of the NTAccount class accepts either a single string representing the account name or two strings, one representing the domain name and the other representing the account on that domain.
To facilitate SID lookups, the Translate method takes a Type argument and returns an IdentityReference object. You must convert or cast the IdentityReference object to a SecurityIdentifier object to retrieve the Sid for the specified account.
The Value property of the SecurityIdentifier and NTAccount class returns a SID and fully- qualified user name string, respectively.
The Write method of the Trace class outputs the specified message into the specified category.

Incorrect Answers:
B: You should not use the code that does not specify the SecurityIdentifier class because the NTAccount class does not have a SID property.
C: You should not use the code that does not specify the NTAccount and SecurityIdentifier classes because there is no SID property in the WindowsIdentity class.
D: You should not use the code that does not specify the NTAccount class because a SecurityIdentifier object cannot be instantiated using an account name as an argument, and it does not contain a Name property.

· WindowsIdentity
· NTAccount
· SecurityIdentifier

· NTAccount.Translate(Type)
· Übersetzt den Kontonamen, der durch das NTAccount-Objekt dargestellt wird, in einen anderen von IdentityReference abgeleiteten Typ.

QUESTION 51
You are currently creating a sales report application that requires Windows authentication on Certkiller .com's domain.
To achieve this, you are required to implement role-based security within the sales report application.
You establish that the method shown below should only be invoked by members of the Managers group:

```
public void UpdateEmpSalesBonus (int empID, double amount) { //Update employee's salary
}
```

You need to ensure that invocation of the UpdateEmpSalesBonus method is restricted to only managers.
What should you do? (Choose two)

A. Apply the following attribute to the UpdateEmpSalesBonus method:
 [WindowsPrincipalPermission (SecurityAction.Demand, Role = "Managers")]
B. Apply the following code to the UpdateEmpSalesBonus method:
 WindowsIdentity user = WindowsIdentity.GetCurrent ();
 if (user.IsInRole ("Managers")){
 //Update employee's salary
 }
C. Apply the following attribute to the UpdateEmpSalesBonus method:
 [PrincipalPermission (SecurityAction.Demand, Role = "Managers")]
D. Apply the following code to the UpdateEmpSalesBonus method:
 if (Thread.CurrentPrincipal.IsInRole("Managers")){
 //Update employee's salary
 }

Answer: CD
Section: (none)

Explanation/Reference:
Imperative role-based security can use the PrincipalPermission class or the IPrincipal object directly.
The PricipalPermission class takes a user name and role as string arguments representing the required membership.
The Demand method indicates that all callers must belong to the user or group membership specified in the constructor to access the resource.
The IPrincipal object can be retrieved using the Thread.CurrentPricipal property. The IsInRole method takes a role argument as a string and returns a Boolean value indicating whether the current caller belongs to that group or not.

Incorrect Answers:
A: You should not use the attribute that applies the WindowsPrincipalPermission attribute because no such attribute exists in the .NET Framework 2.0 class library.
B: You should not use the code that invokes the IsInRole method on the WindowsIdentity class because no such method exists.
· Es gibt nur PrincipalPermission - WindowsPrincipalPermission existiert nicht !!! · IPrincipal.IsInRole - Methode (von Thread.CurrentPrincipal) bzw.
PrincipalPermissionAttribute Eigenschaft Role
· IPrincipal hat Member Identity und Methode IsInRole

QUESTION 52
You have recently created a Windows service application and need to define a Windows service class.
What should you do?

A. Use the following code:
public class TestService : System.ServiceProcess.WindowsService {
//Implementation details
}
B. Use the following code:
public class TestService : System.ServiceProcess.IWindowsService {
//Implementation details
}
C. Use the following code:
public class TestService : System.ServiceProcess.ServiceBase {
//Implementation details
}
D. Use the following code:
public class TestService : System.ServiceProcess.IService {
//Implementation details
}

Answer: C
Section: (none)

Explanation/Reference:
Explanation: The ServiceBase class contains event methods, such as OnStart, OnStop, and Run, for controlling Windows service classes. The OnStart method code is executed when a Windows service is either manually started or when the system is booted if the Startup type is set to Automatic. The OnStop method code is executed when a Windows service is either manually stopped or when the system is shut down. The Main method is the first point of execution when running any windows application (.exe). For a Windows service to run in an application process, you must invoke the Run method on the ServiceBase class. The Run method is overloaded to accept either a single ServiceBase object or an array of ServiceBase objects.
Incorrect Answers:
A, B, D: You should not use either of the code fragments from the WindowsService class or implement the IService and IWindowsService interfaces because no such class or interfaces exist in the System. ServiceProcess namespace.

· System.ServiceProcess.ServiceBase !!!

QUESTION 53
You have been given the task of developing a Windows service application that regularly monitors other Windows services on the same computer.
This Windows service application must also log any abnormal file system activity. You have added the following class to the Windows service application:
public class EnumerateService : ServiceBase {
public static EnumerateService () {
this.ServiceName = "Enumerate Service";
this.CanStop = true;
}

A. Override the OnBoot method instead of the OnStart method.
B. Replace the Main method code with the following code:
EnumerateService service = new EnumerateService();
service.Run();
C. Override the OnLoad method instead of the OnStart method.
D. Replace the Main method code with the following code:
EnumerateService service = new EnumerateService();
Run(service);

Answer: D
Section: (none)

Explanation/Reference:
Explanation: For a Windows service to run in an application process, you have to invoke the Run method on the ServiceBase class. The Run method is overloaded to accept either a single ServiceBase object or an array of ServiceBase objects. The OnStart method code is executed when a Windows service is either manually started or when the system is booted if the Startup type is set to Automatic. The OnStop method code is executed when a Windows service is either manually stopped or when the system is shut down. The Main method is the first point of execution when running any windows application (.exe).

Incorrect Answers:
A C: You should not override the OnBoot or OnLoad method because there are no such methods in the ServiceBase class.
B: For a Windows service to run in an application process, you have to invoke the Run method on the ServiceBase class. The Run method is overloaded to accept either a single ServiceBase object or an array of ServiceBase objects. This code will not compile because the Run method is a class member and does not take zero arguments.

· Die statische Methode SeviceBase.Run(service_instanz) wird hier verwendet. · Da die Klasse von ServiceBase abgeleitet ist, Kann die Schreibweise Run(service_instanz) verwendet werden.

· SeviceBase.Run(service_instanz); !!!

QUESTION 54
You have recently created a business application, which requires complex installation logic.
You add the following code to your project after electing to create a custom installer for the business application.

```
public class ApplicationInstaller : Installer {
public override void Install (IDictionary stateSaver) {
//Install the application
Base.Install (stateSaver);
}
public override void Commit (IDictionary savedState) {
//Commit the application
```

A. The assembly should be compiled and the Install.exe tool should be run.
B. The RunInstaller attribute should be added to the business application assembly and it should be set to true.
C. The assembly should be compiled and should be run as normal.
D. The RunInstaller attribute should be added to the ApplicationInstaller class and it should be set to true.

Answer: D
Section: (none)

Explanation/Reference:
Explanation:

Incorrect Answers:
A: This option should be executed after applying the RunInstaller attribute and setting it to true.
B: You should not add the RunInstaller attribute to the assembly because the RunInstaller attribute is applied to a class, not the entire assembly.
C: You should not use this option because the installer class will be invoked without applying the RunInstaller attribute with a value of true.

· RunInstaller attribute für ApplicationInstaller class und true !!!

· RunInstallerAttribute:

· Gibt an, ob bei der Installation der Assembly der Installer für benutzerdefinierte Aktionen von Visual Studio
· oder Installer-Tool (Installutil.exe) aufgerufen werden soll.

· Konstruktor:

· public RunInstallerAttribute (bool runInstaller)

· runInstaller
· true, wenn bei der Installation einer Assembly ein Installer aufgerufen werden soll, andernfalls false.

QUESTION 55
You are developing an application to perform mathematical calculations.
You develop a class named CalculationValues.
You write a procedure named PerformCalculation that operates on an instance of the class.
You need to ensure that the user interface of the application continues to respond while calculations are being performed.
You need to write a code segment that calls the PerformCalculation procedure to achieve this goal.
Which code segment should you use?

A.
```
private void PerformCalculation() {...}
private void DoWork(){
CalculationValues myValue = new CalculationValues();
Thread newThread = new Thread(new ThreadStart(performCalculation));
newThread.Start(myValues);
}
```
B.
```
private void PerformCalculation() {...}
private void DoWork(){
CalculationValues myValue = new CalculationValues();
ThreadStart delStart = new ThreadStart(PerformCalculation);
Thread newThread = new Thread(delStart);
if (newThread.IsAlive) {newThread.Start(myValue);}
}
```
C.
```
private void PerformCalculation (CalculationValues values) {...}
private void DoWork(){
CalculationValues myValue = new CalculationValues();
Application.DoEvents();
PerformCalculation(myValue);
Application.DoEvents();
}
```
D.
```
private void PerformCalculation(object values) {...}
private void DoWork(){
CalculationValues myValues = new CalculationValues();
Thread newThread = new Thread(new ParameterizedThreadStart(PerformCalculation));
newThread.Start(myValues);
}
```

Answer: D
Section: (none)

Explanation/Reference:
Explanation: It is a requirement that the UI continues to respond, hence PerformCalculation should execute in a separate thread.
PerformCalculation requires a parameter hence you should use the ParameterizedThreadStart delegate.

A& B attempt to supply a parameter to the ThreadStart delegate. This is not possible.

C Does not run in a new thread and hence may leave the UI unresponsive.

· Warum ist es sicher, dass Parameter benötigt werden (geht aus der Angabe nicht hervor) !!!

QUESTION 56
You are writing a method that returns an ArrayList named al.
You need to ensure that changes to the ArrayList are performed in a thread-safe manner.
Which code segment should you use?

A. ArrayList al = new ArrayList();
 lock (al.SyncRoot){
 return al;
 }
B. ArrayList al = new ArrayList();
 lock (al.SyncRoot.GetType()){
 return al;
 }
C. ArrayList al = new ArrayList();
 Monitor.Enter(al);
 Monitor.Exit(al);
 return al;
D. ArrayList al = new ArrayList();
 ArrayList sync_al = ArrayList.Synchronized(al);
 return sync_al;

Answer: D
Section: (none)

Explanation/Reference:
Explanation: A & C the lock will be released when the method returns.

B Does not lock the arraylist but attempts to lock its type.

· ArrayList.Synchronizied(al_not_sync);
· gibt einen synchronisierten (threadsicheren) ArrayList-Wrapper zur

QUESTION 57
Certkiller.com has asked you to create a multi-threaded application, which executes a critical database backup operation on an hourly basis.
You define this operation with the following code:
public void BackupDB () {
//Implementation code
}
You then create a Thread object for the purpose of invoking this method.
You need to ensure that the thread is scheduled for execution before any other thread at runtime.
What should you do?

A. Use the following code:
 Thread th = new Thread (BackupDB);
 th.Scheduled = ThreadScheduled.Before;
 th.Start ();
B. Use the following code:
 Thread th = new Thread (BackupDB);
 th.Priority = ThreadPriority.AboveNormal;
 th.Start ();

C. Use the following code:
```
Thread th = new Thread (BackupDB);
th.Priority = ThreadPriority.Highest;
th.Start ();
```
D. Use the following code:
```
Thread th = new Thread (BackupDB);
th.Scheduled = ThreadScheduled.First;
th.Start ();
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This code instantiates a Thread object that will execute the BackupDB method, specifies the highest priority level for scheduling threads for execution, and starts the thread running. When instantiating a Thread object, you must specify the name of the method it will invoke. The Priority property indicates the relative position of a thread in the wait queue when being scheduled for execution. If two threads arrive in the wait queue at relatively the same time, the higher priority thread will receive the time slice before the other. The Priority property is a ThreadPriority enumeration value, which can be Lowest, BelowNormal, Normal, AboveNormal, and Highest.by default, the Priority property is set to ThreadPriority.Normal.

Incorrect Answers:
A D: You should not use the code fragments that set the Scheduled property with the ThreadSchedule enumeration because no such property or enumeration exists in the System.Threading namespace.
B: You should not use the code that specifies the value ThreadPriority.AboveNormal for the Priority property because this will not schedule the thread for execution before any other thread.

· Highest !!!

QUESTION 58
You have recently created a multithreaded application to manage Certkiller .com's inventory system.
The fulfillment task has to be executed on a regular basis, while other tasks are performed in the application.
The task does not need any input to start.

You are required to create and start the fulfillment thread using the appropriate code.
What code should you use?

A. ThreadStart work = new ThreadStart(Fulfill);
```
Thread thFulfill = new Thread(work);
```
B. ParameterizedThreadStart work = new ParameterizedThreadStart(Fulfill);
```
Thread thFulfill = new Thread(work);
```
C. ThreadStart work = new ThreadStart(Fulfill);
```
Thread thFulfill = new Thread(work);
thFulfill.Start();
```
D. ParameterizedThreadStart work = new ParameterizedThreadStart(Fulfill);
```
Thread thFulfill = new Thread(work);
thFulfill.Start();
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This code creates a ThreadStart delegate that references the Fulfill method, creates a Thread object named thFulfill, and invokes the Start method to begin the thread execution.

Incorrect Answers:

A: You should not use the code that uses the ThreadStart delegate but does not call the Start method because you are required to create and start the fulfillment thread.
B: You should not use the code that uses the ParameterizedThreadStart delegate and does not call the Start method. You have to invoke the Start method to begin thread execution.
D: You should not use the code that uses the ParameterizedThreadStart delegate and calls the Start method. The ParameterizedThreadStart delegate is used to reference a method that takes a generic object as an argument and, in this scenario, the fulfill method takes no arguments

· Kein Parameter - soll gestartet werden !!!

QUESTION 59
You are currently in the process of developing a business logic component that requires long calculations.
You have identified numerous tasks within this application that can be done asynchronously.
You notice that these tasks are mutually dependent and require complex synchronization techniques so that it can manage efficiently.
You decide to use Microsoft .NET 2.0 to take advantage of its new thread management features.
You need to create and start the application threads.
What should you do?

A. Use the following code:
```
ThreadPool thPool = new ThreadPool("Current Application");
Thread th1 = new Thread(Task1);
Thread th2 = new Thread(Task2);
Thread th3 = new Thread(Task3);
th1.StartInPool(thPool);
th2.StartInPool(thPool);
th3.StartInPool(thPool);
```
B. Use the following code:
```
ThreadPool thPool = new ThreadPool("Current Application");
thPool.QueueUserWorkItem(Task1);
thPool.QueueUserWorkItem(Task2);
thPool.QueueUserWorkItem(Task3);
```
C. Use the following code:
```
ThreadPool.QueueUserWorkItem(Task1);
ThreadPool.QueueUserWorkItem(Task2);
ThreadPool.QueueUserWorkItem(Task3);
```
D. Use the following code:
```
Thread th1 = new Thread(Task1);
Thread th1 = new Thread(Task2);
Thread th1 = new Thread(Task3);
th1.Start();
th2.Start();
th3.Start();
```

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This code uses the QueueUserWorkItem method of the ThreadPool class to add tasks to the current application domain's thread pool. The QueueUserWorkItem method takes a WaitCallback delegate as an argument and manages the tasks using background threads. This allows the developer to concentrate on business logic and requires minimal synchronization code.

Incorrect Answers:
A D: You should not use either of the code fragments that instantiate the Thread objects explicitly because it will require excessive synchronization code to manage effectively.

B: You should not use the code that instantiates a ThreadPool object because the ThreadPool class is a static class and cannot be instantiated.

public static class ThreadPool
ThreadPool ist eine statische Klasse !!! - daher kein Instanz möglich !!!

ThreadPool.QueueUserWorkItem - übernimmt das starten selbst (wenn aus der Warteschlange !!!)
CallBack (WaitCallback) ist möglich.

QUESTION 60
You have created a Windows service application for the purpose of monitoring the number of active service requests running on Certkiller .com's server.
You want to configure this Windows service application to produce a report every ten minutes.
You start by placing the reporting logic in the GenerateReport method of this Windows service.
You want to create a Timer object that invokes this method every ten minutes.

What should you do?

A. Use the following code:
 Timer tmrReport = new Timer(new TimerCallback (GenerateReport), null, 600000, 0);
B. Use the following code:
 Timer tmrReport = new Timer(new TimerCallback (GenerateReport), null, 10, 0);
C. Use the following code:
 Timer tmrReport = new Timer(new TimerCallback (GenerateReport), null, 0, 600000);
D. Use the following code:
 Timer tmrReport = new Timer(new TimerCallback (GenerateReport), null, 0, 10);

Answer: C
Section: (none)

Explanation/Reference:
Explanation: This code creates a Timer object named tmrReport that will invoke the GnerateReport every ten minutes. The first argument of the Timer constructor is a TimerCallback delegate that points to the method to be invoked. The second argument is the object that will be sent to the callback method. The third and fourth arguments are integers that specify delay and interval in milliseconds, respectively. Because the interval is in milliseconds, the following conversion must be made:
10 minutes = 10 * 60 seconds = 600 * 1000 milliseconds = 600,000 milliseconds Therefore, the delay is set to 0, and the interval is set to 600,000 milliseconds.

Incorrect Answers:
A: This option is incorrect because the delay and the interval arguments are reversed. If you use this option, then the tmrReport will invoke the GnerateReport method only once in ten minutes.
B: This option is incorrect because the delay and the interval arguments are reversed. Also, the interval argument is incorrectly specified. It should be specified in milliseconds.
D:
The interval argument is incorrectly specified. It should be specified in milliseconds, not minutes. This code would set the interval to ten milliseconds instead of ten minutes.

· Parameterreihenfolge und 10 Min = 60 * 1000 * 10 = 600000 ms

QUESTION 61
You have recently created an application that includes the code shown below.
public delegate string GetFileContentsDel ();
public string GetFileContents () {
//Process file and return results

}
You now need to invoke the GetFileContents method asynchronously.
You have to ensure that the code you use to invoke the GetFileContents method will continue to process other user instructions, and displays the results as soon as the GetFileContents method finishes processing. What should you do?

A. Use the following code:
 GetFileContentsDel delAsync = new GetFileContentsDel (GetFileContents);
 IAsyncResult result = delAsync.BeginInvoke (null, null);
 while (!result.IsCompleted) {
 //Process other user instructions
 }
 string strFile = delAsync.EndInvoke (result);
B. Use the following code:
 GetFileContentsDel delAsync = new GetFileContentsDel (GetFileContents);
 string strFile = delAsync.Invoke ();
C. Use the following code:
 string strFile = GetFileContents.Invoke ();
D. Use the following code:
 GetFileContentsDel delAsync = new GetFileContentsDel (GetFileContents);
 IAsyncResult result = delAsync.BeginInvoke (null, null);
 //Process other user instructions
 string strFile = delAsync.EndInvoke (result)

Answer: A
Section: (none)

Explanation/Reference:
Explanation: This code instantiates a GetFileContentsDel delegate that references the GetFileContents method. Then, the BeginInvoke method is invoked to implicitly create and start the worker thread. The BeginInvoke method takes the same arguments as the method it references but also includes an AsyncCallack delegate and a generic object. The AsyncCallack delegate references the method that the worker thread will invoke when its processing is complete. In this scenario, there is no AsyncCallack delegate specified. Then, the code polls the IAsyncResult object to determine if it's processing is complete using the IsCompleted property. Once the processing is complete, the loop is exited and the EndInvoke method returns the result from the GetFileContents method.

Incorrect Answers:
B, C: You should not use either of the code fragments that use the Invoke method because this is not a technique in asynchronous processing.
D: you should not use the code that does not poll the IAsyncResult object by retrieving the IsCompleted property.

· D würde auch funktionieren, aber hier wird A bevorzugt, da result.IsCompleted verwendet wird.

QUESTION 62
You develop a service application that needs to be deployed.
Your network administrator creates a specific user account for your service application.
You need to configure your service application to run in the context of this specific user account.
What should you do?

A. Prior to installation, set the StartType property of the ServiceInstaller class.
B. Prior to installation, set the Account, Username, and Password properties of the ServiceProcessInstaller class.
C. Use the CONFIG option of the net.exe command-line tool to install the service.

D. Use the installutil.exe command-line tool to install the service.

Answer: B
Section: (none)

Explanation/Reference:
Explanation: The ServiceProcessInstaller class is automatically called during installation. It is the ideal place to specify the default service settings such as account credentials.

ServiceInstaller.StartType controls how the service will start up e.g automatically or manually. It has nothing to do with a specific account.

Net.exe with the config option is used to configure the server or workstation services.

Installutil.exe can be used to install the service but it is not possible to specify or override service account credentials.
They have to be specified in the ServiceProcessInstaller class.

· ServiceProcessInstaller-Instanzen beinhalten Eigenschaften, die geändert werden können.
· Über diese kann unter anderem festgelegt werden, dass eine Dienstanwendung unter einem anderen Konto als
· dem des angemeldeten Benutzers ausgeführt werden soll. · Sie können ein bestimmtes Paar aus Username und Password angeben, unter dem der Dienst ausgeführt werden soll,
· oder Account verwenden, um das Ausführen des Dienstes unter dem Systemkonto des Computers, einem lokalen oder Netzwerkdienstkonto oder einem Benutzerkonto anzugeben.

QUESTION 63
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 banking Windows Forms application and are busy working on a function that retrieves the images of cancelled checks and displays them on the from. You currently have access to a method that reads the images from Microsoft SQL server as a series of bytes.
You are required to select a class that allows you to transfer the image from SQL Server to the Windows Forms application whilst your solution reduces the need of a temporary buffers and files
What should you do?

A. Use the MemoryStream class.
B. Use the NetworkStream class.
C. Use the FileStream class.
D. Use the BufferedStream class.

Answer: A
Section: (none)

Explanation/Reference:
Explanation: With the given scenario objective you should use the MemoryStream class which allows you to read the image data in memory and stream it to a Windows Forms application without creating any temporary buffers or files.
Incorrect Answers:
B: There is no connection established directly to the SQL Server database so using this option is out of the question.
C, D:
The streaming class in question in this option is incorrect because both require the creation of temporary files or buffers.

QUESTION 64
You work as an application developer at Certkiller .com.
Certkiller .com has been contracted by a local doctor's clinic to develop a client application using Microsoft .NET 2.0 that sends patient visit information to a remote server at the clinic's main office.
This data must be transmitted via a secure network stream because it contains patient protected health information (PHI). The data will be sent from a windows application client on the doctor's notebook computer to a windows service hosted on a remote server. Both of these applications employ a certificate store for network identification.
You need to create a secure data stream by adding certain classes to the client application.

What classes should you add? (Choose three)

A. The MD5CryptoServiceProvider class.
B. The X509Certificate class.
C. The NetworkStream class.
D. The SslStream class.
E. The TcpListener class.
F. The TcpClient class.

Answer: BDF
Section: (none)

Explanation/Reference:
Explanation: You should use the X509Certificateclass to store the server certificate and encrypt data, the SslStream
class to create a secure channel, and the TcpClient class to establish the connection with the server application.
Incorrect Answers:
A: Using this option would only hash the data using the MD5 algorithm.
C: Using this option would not necessarily create a secure channel.
E: This class is used by the server application.

QUESTION 65
You work as the application developer at Certkiller .com. Certkiller .com uses Visual Studio.NET 2005 as its application development platform.
You use a Windwos XP Professional client computer named Certkiller -WS554 as your development computer.

You are developing a .NET Framework 2.0 application on Certkiller -WS554. The application will allow Certkiller .com users to send e-mails.
The Certkiller .com users must be able to send e-mail containing information like budget documents and images.
You decide to use the .NET Framework 2.0 Attachment class to create the e-mail attachments within your application.
You are required to specify the content in an attachment by using the attachment class constructors.
What should you do? (Choose two)

A. The Stream object attachment class should be used.
B. The String object attachment class should be used.
C. The Image object attachment class should be used.
D. The XmlDocument object attachment class should be used.
E. The SqlDataReader object attachment class should be used.

Answer: AB
Section: (none)

Explanation/Reference:
Explanation: In the scenario the Attachment constructors allow you to create attachments from a filename, a String object, or a Stream object.
Incorrect Answers:
C: This method is incorrect and should not be used in the scenario because the Image object Attachment class cannot directly use an Image object.
D: This method is incorrect and should not be used in the scenario because the XmlDocument Attachment class cannot directly use an XmlDocument object.
E: This method is incorrect and should not be used in the scenario because the SqlDataReader Attachment class cannot directly make use of a SqlDataReader object.

QUESTION 66
You work as the application developer at Certkiller .com. You are working on an application named Certkiller App11.
Certkiller App11 must be configured to execute a series of mathematical computations simultaneously.
What should you do next to configure Certkiller App11 to execute a series of mathematical computations simultaneously?

A. Configure the IdealProcessor property of the ProcessThread object.
B. Configure the ProcessorAffinity property of the ProcessThread object.
C. Call the QueueUserWorkItem method of the ThreadPool class for each calculation which should be performed by Certkiller App11.
D. Configure the Process.GetCurrentProcess().BasePriority property to be High.

Answer: C
Section: (none)

Explanation/Reference:
Explanation: The ThreadPool class allows background tasks to run in parallel hence calculations can be queued to run as soon as a ThreadPool Worker thread becomes available. Because the ThreadPool can manage many worker threads, calculations will run in parallel.
ProcessThread.IdealProcessor requests a preferred processor for the thread to run on, it will not however spawn a new thread - which is what is required here to enable concurrency.
ProcessorAffinity gets or sets the processors that this thread can be scheduled to run on. Process.BasePriority gets the base priority of the process.

Exam E

QUESTION 1
You work as a developer at Company.com. You are creating an assembly named Company1. Company1 contains a public method. The global cache contains a second assembly named Company2.

You must ensure that the public method is only called from Company2.

Which permission class should you use?

A. GacIdentityPermission
B. PublisherIdentityPermission
C. DataProtectionPermission
D. StrongNameIdentityPermission

Answer: D
Section: (none)

Explanation/Reference:

QUESTION 2
You develop a service application named PollingService that periodically calls long-running procedures. These procedures are called from the DoWork method. You use the following service application code:

```
partial class PollingService : ServiceBase
{
  bool blnExit = false;
  public PollingService() {}
  protected override void OnStart(string[] args)
  {
    do
    {
      DoWork();
    } while (!blnExit);
  }
  protected override void OnStop()
  {
    blnExit = true;
  }
  private void DoWork() { ...}
}
```

When you attempt to start the service, you receive the following error message: Could not start the PollingService service on the local computer. Error 1053: The service did not respond to the start or control request in a timely fashion. You need to modify the service application code so that the service starts properly. What should you do?

A. Move the loop code into the constructor of the service class from the OnStart method.
B. Drag a timer component onto the design surface of the service. Move the calls to the longrunning procedure from the OnStart method into the Tick event procedure of the timer, set the Enabled property of the timer to True, and call the Start method of the timer in the OnStart method.
C. Add a class-level System.Timers.Timer variable to the service class code. Move the call to the DoWork method into the Elapsed event procedure of the timer, set the Enabled property of the timer to True, and call the Start method of the timer in the OnStart method.

D. Move the loop code from the OnStart method into the DoWork method.

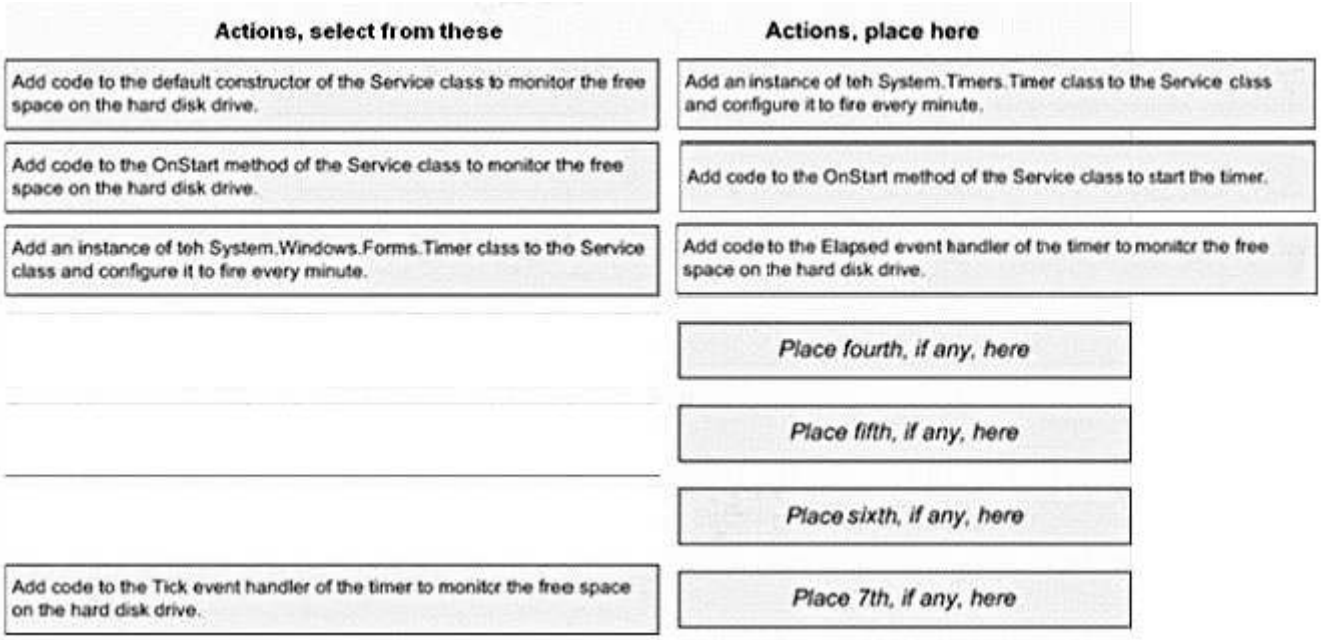
Answer: C
Section: (none)

Explanation/Reference:

QUESTION 3
You work as a developer at Company.com. You create a service application that monitors free space on a hard disk drive. You must ensure that the service application runs in the background and monitors the free space every minute.
What should you do?

Actions, select from these	Actions, place here
Add code to the default constructor of the Service class to monitor the free space on the hard disk drive.	*Place first, if any, here*
Add code to the OnStart method of the Service class to monitor the free space on the hard disk drive.	*Place second, if any, here*
Add an instance of teh System.Windows.Forms.Timer class to the Service class and configure it to fire every minute.	*Place third, if any, here*
Add an instance of teh System.Timers.Timer class to the Service class and configure it to fire every minute.	*Place fourth, if any, here*
Add code to the OnStart method of the Service class to start the timer.	*Place fifth, if any, here*
Add code to the Elapsed event handler of the timer to monitor the free space on the hard disk drive.	*Place sixth, if any, here*
Add code to the Tick event handler of the timer to monitor the free space on the hard disk drive.	*Place 7th, if any, here*

Answer:



Section: (none)

Explanation/Reference:

QUESTION 4
You are creating an application that retrieves values from a custom section of the application configuration file. The custom section uses XML as shown in the following block.

```
<ProjectSection name="ProjectCompany">
  <role name="administrator" />
  <role name="manager" />
  <role name="support" />
</ProjectSection>
```

You need to write a code segment to define a class named Role. You need to ensure that the Role class is initialized with values that are retrieved from the custom section of the configuration file. Which code segment should you use?

A.
```
public class Role : ConfigurationElement
{
  internal string ElementName = "name";
  [ConfigurationProperty("role")]
  public string Name
  {
    get { return ((string)base["role"]); }
  }
}
```

B.
```
public class Role : ConfigurationElement
{
  internal string ElementName = "role";
  [ConfigurationProperty("name", RequiredValue = true)]
  public string Name
  {
    get { return ((string)base["name"]); }
  }
}
```

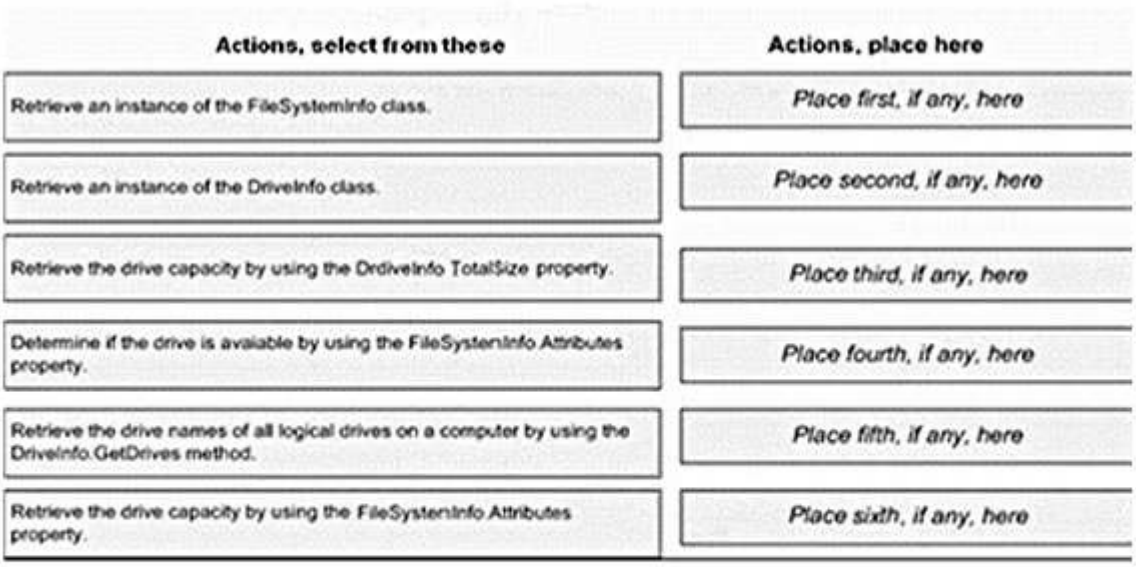
C.
```
public class Role : ConfigurationElement
{
  internal string ElementName = "role";
  private String name;
  [ConfigurationProperty("name")]
  public string Name
  {
    get { return name; }
  }
}
```

D.
```
public class Role : ConfigurationElement
{
  internal string ElementName = "name";
  private String name;
  [ConfigurationProperty("role", RequiredValue = true)]
  public string Name
  {
    get { return name; }
  }
}
```

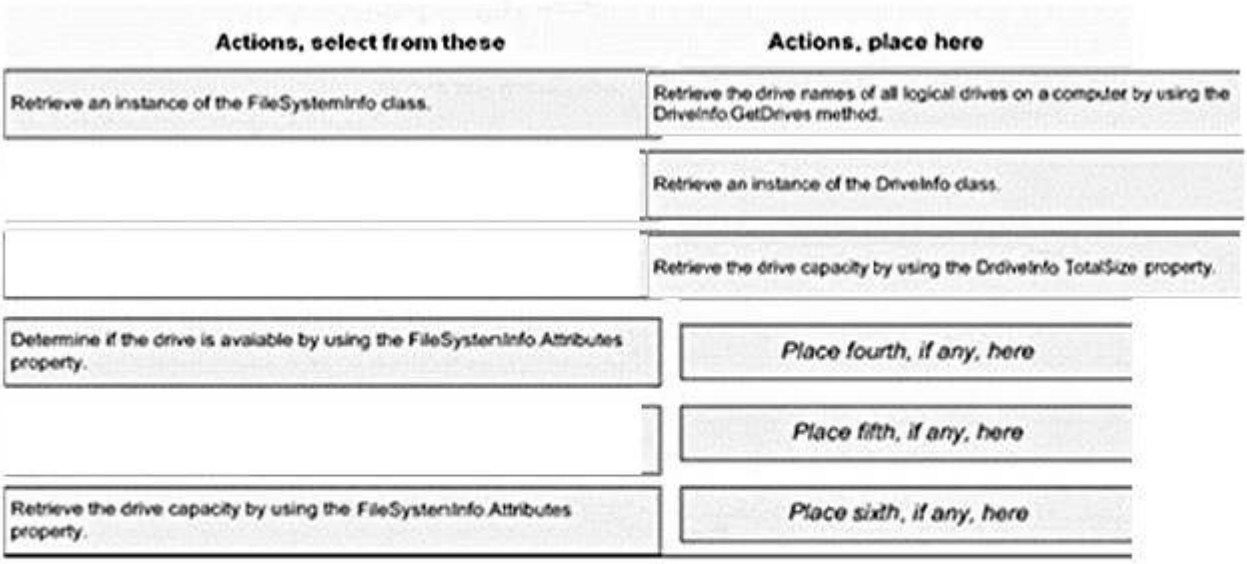
Answer: B
Section: (none)

Explanation/Reference:

QUESTION 5
You work as a developer at Company.com. You are creating an application that provides information about the local computer. The application contains a form that lists each logical drive with the drive properties, such as type, volume label, and capacity. You are required to write a procedure that retrieves properties of each logical drive on the local computer. What should you do? Arrange the appropriate actions in the correct order.


Actions, select from these
Actions, place here
Retrieve an instance of the FileSystemInfo class.
Retrieve an instance of the DriveInfo class.
Retrieve the drive capacity by using the DrdiveInfo TotalSize property.
Determine if the drive is avaiable by using the FileSystemInfo Attributes property.
Retrieve the drive names of all logical drives on a computer by using the DriveInfo.GetDrives method.
Retrieve the drive capacity by using the FileSystemInfo Attributes property.
Place first, if any, here
Place second, if any, here
Place third, if any, here
Place fourth, if any, here
Place fifth, if any, here
Place sixth, if any, here

Answer:


Actions, select from these
Actions, place here
Retrieve an instance of the FileSystemInfo class.
Retrieve the drive names of all logical drives on a computer by using the DriveInfo.GetDrives method.
Retrieve an instance of the DriveInfo class.
Retrieve the drive capacity by using the DrdiveInfo TotalSize property.
Determine if the drive is avaiable by using the FileSystemInfo Attributes property.
Retrieve the drive capacity by using the FileSystemInfo Attributes property.
Place fourth, if any, here
Place fifth, if any, here
Place sixth, if any, here

Section: (none)

Explanation/Reference:

QUESTION 6
You are developing a method to call a COM component. You need to use declarative security to explicitly request the runtime to perform a full stack walk. You must ensure that all callers have the required level of trust for COM interop before the callers execute your method. Which attribute should you place on the method?

A. `[SecurityPermission(SecurityAction.Demand,Flags=SecurityPermissionFlag.UnmanagedCode)]`
B. `[SecurityPermission(SecurityAction.LinkDemand,Flags=SecurityPermissionFlag.UnmanagedCode)]`
C. `[SecurityPermission(SecurityAction.Assert,Flags = SecurityPermissionFlag.UnmanagedCode)]`
D. `[SecurityPermission(SecurityAction.Deny,Flags = SecurityPermissionFlag.UnmanagedCode)]`

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 7
You write the following custom exception class named CustomException.

```
public class CustomException : ApplicationException
{
  public static int COR_E_ARGUMENT = unchecked((int)0x80070057);
  public CustomException(string msg) : base(msg)
  {
    HResult = COR_E_ARGUMENT;
  }
}
```

You need to write a code segment that will use the CustomException class to immediately return control to the COM caller. You also need to ensure that the caller has access to the error code. Which code segment should you use?

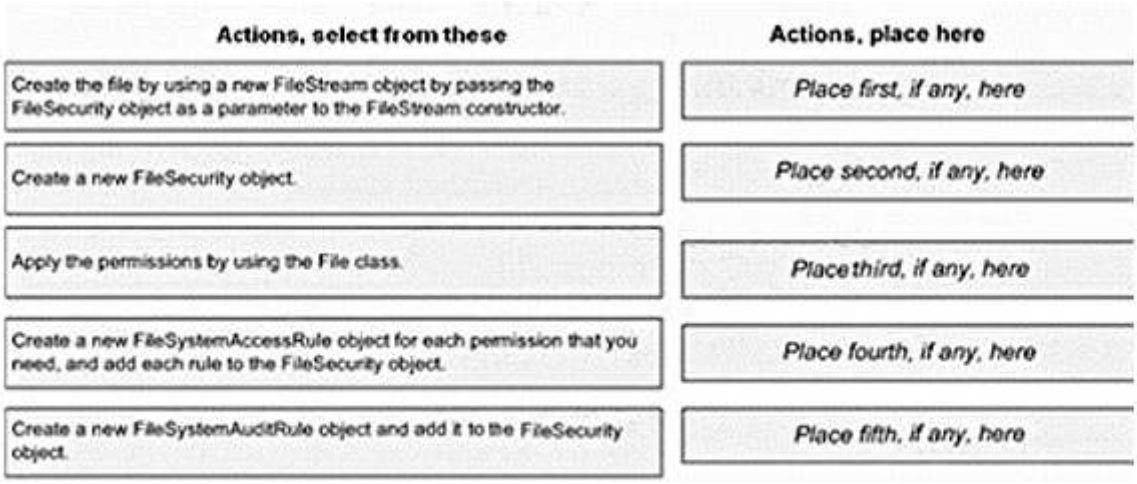
A. `return Marshal.GetExceptionForHR(CustomException.COR_E_ARGUMENT);`
B. `return CustomException.COR_E_ARGUMENT;`
C. `Marshal.ThrowExceptionForHR(CustomException.COR_E_ARGUMENT);`
D. `throw new CustomException("Argument is out of bounds");`

Answer: D
Section: (none)

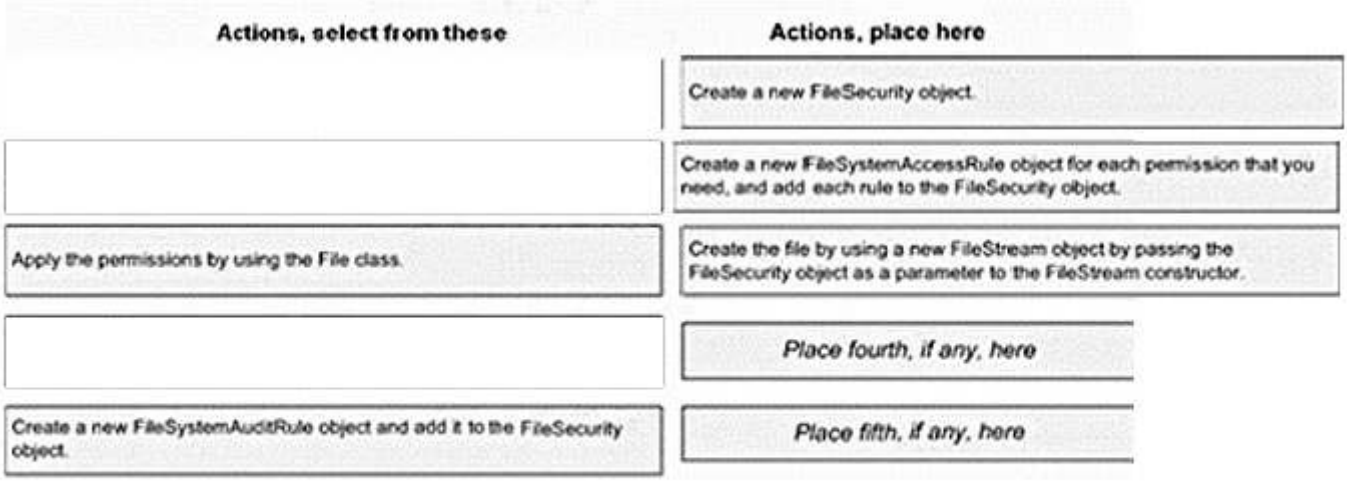
Explanation/Reference:

QUESTION 8
You work as a developer at Company.com. You are developing an application to create a new file on the local

file system. You need to define specific security settings for the file. You must deny the file inheritance of any default security settings. What should you do?



Answer:



Section: (none)

Explanation/Reference:

QUESTION 9
You are creating a class named Age. You need to ensure that the Age class is written such that collections of Age objects can be sorted. Which code segment should you use?

A.
```
public class Age
{
  public int Value;
  public object CompareTo(object obj)
  {
    if (obj is Age)
    {
      Age_age = (Age) obj;
      return Value.ComapreTo(obj);
    }
    throw new ArgumentException("object not an Age");
  }
}
```

B.
```
public class Age
{
  public int Value;
  public object CompareTo(int iValue)
  {
  try { return Value.ComapreTo(iValue); }
  catch { throw new ArgumentException("object not an Age"); }
  }
}
```

C.
```
public class Age : IComparable
{
  public int Value;
  public int CompareTo(object obj)
  {
    if (obj is Age)
    {
      Age_age = (Age) obj;
      return Value.ComapreTo(age.Value);
    }
    throw new ArgumentException("object not an Age");
  }
}
```

D.
```
public class Age : IComparable
{
  public int Value;
  public int CompareTo(object obj)
  {
    try { return Value.ComapreTo(((Age) obj).Value); }
    catch { return -1; }
  }
}
```

Answer: C
Section: (none)

Explanation/Reference:

QUESTION 10
You are developing an assembly to access file system. Need to write a segment code to configure CLR stop loading the assembly if file permssion is absent.

A. [FileIOPermission(SecurityAction.RequestOptional, AllLocalFiles = FileIOPermissionAccess.Read)]
B. [FileIOPermission(SecurityAction.RequestMinimum, AllFiles = FileIOPermissionAccess.Read)]
C. [FileIOPermission(SecurityAction.RequestRefuse, AllFiles = FileIOPermissionAccess.Read)]

D. [FileIOPermission(SecurityAction.RequestOptional, AllFiles = FileIOPermissionAccess.Read)]

Answer: B
Section: (none)

Explanation/Reference:

QUESTION 11
Given the code like this:

```
while(!loop)
{
  //Thread code here
  Dowork();
}
```

You need to write more code to class to run DoWork() with 30-second intervals using minimum resources

A. Thread.Sleep(30000)
B. Thread.SpinWait(30000)
C. Thread.QueueUserWorkItem(30000)
D. Thread.SpinWait(30)

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 12
You are developing an application that will deploy by using ClickOnce. You need to test if the application executes properly. You need to write a method that returns the object, which prompts the user to install a ClickOnce application. Which code segment should you use?

A. return ApplicationSecurityManager.ApplicationTrustManager;
B. return AppDomain.CurrentDomain.ApplicationTrust;
C. return new HostSecurityManager();
D. return SecurityManager.PolicyHierarchy();

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 13
You create a DirectorySecurity object for the working directory.
You need to identify the user accounts and groups that have read and write permissions.
Which method should you use on the DirectorySecurity object?

A. the GetAuditRules method

B. the GetAccessRules method
C. the AccessRuleFactory method
D. the AuditRuleFactory method

Answer: B
Section: (none)

Explanation/Reference:

QUESTION 14
You are developing an auditing application to display the trusted ClickOnce applications that are installed on a computer.
You need the auditing application to display the origin of each trusted application.
Which code segment should you use?

A.
```
ApplicationTrustCollection trusts;
trusts = ApplicationSecurityManager.UserApplicationTrusts;
foreach (ApplicationTrust trust in trusts)
{
Console.WriteLine(trust.ToString());
}
```

B.
```
ApplicationTrustCollection trusts;
trusts = ApplicationSecurityManager.UserApplicationTrusts;
foreach (ApplicationTrust trust in trusts)
{
Console.WriteLine(trust.ExtraInfo.ToString());
}
```

C.
```
ApplicationTrustCollection trusts;
trusts = ApplicationSecurityManager.UserApplicationTrusts;
foreach (ApplicationTrust trust in trusts)
{
Console.WriteLine(trust.ApplicationIdentity.FullName);
}
```

D.
```
ApplicationTrustCollection trusts;
trusts = ApplicationSecurityManager.UserApplicationTrusts;
foreach (object trust in trusts)
{
Console.WriteLine(trust.ToString());
}
```

Answer: C
Section: (none)

Explanation/Reference:

QUESTION 15
You are developing an application that stores data about your company's sales and technical support teams.

You need to ensure that the name and contact information for each person is available as a single collection when a user queries details about a specific team.
You also need to ensure that the data collection guarantees type safety.

Which code segment should you use?

A.
```
Hashtable team = new Hashtable();
team.Add(1, "Hance");
team.Add(2, "Jim");
team.Add(3, "Hanif");
team.Add(4, "Kerim");
team.Add(5, "Alex");
team.Add(6, "Mark");
team.Add(7, "Roger");
team.Add(8, "Tommy");
```

B.
```
ArrayList team = new ArrayList();
team.Add("1, Hance");
team.Add("2, Jim");
team.Add("3, Hanif");
team.Add("4, Kerim");
team.Add("5, Alex");
team.Add("6, Mark");
team.Add("7, Roger");
team.Add("8, Tommy");
```

C.
```
Dictionary<int, string> team = new Dictionary<int, string>();
team.Add(1, "Hance");
team.Add(2, "Jim");
team.Add(3, "Hanif");
team.Add(4, "Kerim");
team.Add(5, "Alex");
team.Add(6, "Mark");
team.Add(7, "Roger");
team.Add(8, "Tommy");
```

D.
```
string[] team = new string[] {"1, Hance", "2, Jim", "3, Hanif", "4, Kerim", "5,
Alex", "6, Mark", "7, Roger", "8, Tommy"};
```

Answer: C
Section: (none)

Explanation/Reference:

QUESTION 16
You create Microsoft Windows-based applications.
You create an application that requires users to be authenticated by a domain controller.
The application contains a series of processor intensive method calls that require different database connections.

A bug is reported during testing.
The bug description states that the application hangs during one of the processor-intensive calls more than 50 percent of the times when the method is executed.
Your unit test for the same method was successful.

You need to reproduce the bug.

Which two factors should you ascertain from the tester? (Each correct answer presents part of the solution. Choose two.)

A. Security credentials of the logged on user
B. Code access security settings
C. Hardware settings
D. Network settings
E. Database settings

Answer: DE
Section: (none)

Explanation/Reference:

QUESTION 17
You are a Web developer for Contonso. You are creating an online inventory Web site to be used by employees in Germany and the United States.
When a user selects a specific item from the inventory, the site needs to display the cost of the item in both United States currency and German currency.
The cost must be displayed appropriately for each locale.

You want to create a function to perform this task.

Which code should you use?

A.
```
private string CKGetDisplayValue(double value,string inputRegion)
{
string display:
RegionInfo region;
region = new RegionInfo(inputRegion);
display = value.ToString(”C”);
display += region.CurrencySymbol;
return display;
}
```
B.
```
private string CKGetDisplayValue(double value,string inputCulture)
{
string display;
NumberFormatInfo LocalFormat = (NumberFormatInfo)NumberFormatInfo.CurrentInfo.
Clone();
display = value.ToString(”C”, LocalFormat);
return display;
}
```
C.
```
private string CKGetDisplayValue(double value,string inputRegion)
{
string display;
RegionInfo region;
region = new RegionInfo(inputRegion);
display = value.ToString(”C”);
display += region.ISOCurrencySymbol;
return display;
}
```
D.
```
private string CKGetDisplayValue(double value, string inputCulture)
{
string display;
CultureInfo culture;
culture = new CultureInfo(inputCulture);
display = value.ToString(”C”, culture);
return display;
}
```

Answer: D
Section: (none)

Explanation/Reference:
Explanation: We create a new CultureInfo object based on the inputCulture parameter. We then produce the result with “C” constant, representing the current culture, and the new CultureInfo object: display =

value.ToString(”C”, culture)
Note: The CultureInfo Class contains culture-specific information, such as the language, country/region, calendar, and cultural conventions associated with a specific culture. This class also provides the information required for performing culture-specific operations, such as casing, formatting dates and numbers, and comparing strings.
Incorrect Answers
B: The NumberFormatInfo class defines how currency, decimal separators, and other numeric symbols are formatted and displayed based on culture. However, we should create a CultureInfo object, not a NumberFormatInfo object).
A, C: We should use the CultureInfo class not the RegionInfo class.
Note: In contrast to CultureInfo, RegionInfo does not represent preferences of the user and does not depend on the user’s language or culture.

QUESTION 18
You work as the application developer at Hi-Tech.com. You create a new custom dictionary named MyDictionary.

Choose the code segment which will ensure that MyDictionary is type safe?

A. `Class MyDictionary Implements Dictionary (Of String,String)`
B. `Class MyDictionary Inherits HashTable`
C. `Class MyDictionary Implements IDictionary`
D.
```
Class MyDictionary
End Class
Dim t as New Dictionary (Of String, String)
Dim dict As MyDIctionary= CType (t,MyDictionary)
```

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 19
What kind of object does the generic Dictionary enumerator return?

A. Object
B. Generic KeyValuePairt object
C. Key
D. Value

Answer: B
Section: (none)

Explanation/Reference:

QUESTION 20
Which event would you use to run a method immediately before deserialization occurs?

A. OnSerializing
B. OnDeserializing

C. OnSerialized
D. OnDeserialized

Answer: B
Section: (none)

Explanation/Reference:

QUESTION 21
You work as the application developer at Cert-Tech.com. Cert-Tech.com uses Visual Studio.Net 2005 as its application development platform. You use a Windows XP Professional client computer named Client01 as your development computer.
You are developing a .Net Framework 2.0 application on Client01. You write the code shown below:

```
Public Class Shape
Private shapeName as String

Public Sub Shape(ByVal shapeName as String)
Me.shapename=shapeName
End Sub

Public Overridable Fuction GetName() As String
Return shapeName
End Function

Private Sub DrawShape()
'Additional code goes here
End Sub
End Class
```

You later decide to have the application compiled and registered for COM interoperability. The other developers on your team complaing that they are unable to create an instance of the Shape class in their COM applications. You are required to ensure that COM applications are able to create an instance of the Shape class.
What should you do?

A. The following code should be added to the Shape class:
 Public Sub New()
 End Sub
B. The following ComVisible attribute to the Shape class:
 <ComVisible(True)>
C. The definition of the GetName method should be modified as below:
 Public Function GetName() As String
 Return shapename
 End Function
D. The follwoing ComVisible attribute should be added to each method of the Shape class:
 <ComVisible(True)>

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 22
You deploy several .NET-connected applications to a shared folder on your company network. Your applications require full trust to execute correctly. Users report that they receive security exceptions when they attempt to run the applications on their computers. You need to ensure that the applications on the users computers run with full trust. What should you do?

A. Apply a string name to the applications by using the Strong Name tool (Sn.exe)
B. Use the security settings of internet explorer to add the shared folder to the list of trusted sites
C. Use the Code Access Security Policy tool (Caspol.exe) to add a new code group that has the full trust permission set. The new code group must also contain a URL membership condition that specifies the URL of the shared folder where your application reside
D. Grant the full trust permission set to the Trusted Zone code group by using the Code Access Security Policy Tool (Caspol.exe)

Answer: C
Section: (none)

Explanation/Reference:

QUESTION 23
Which methods allow COM components to be used in .NET applications? (Choose all that applay.)

A. Add a reference to the component throudh Microsoft Visual Studio 2005.
B. Use the type Library Import tool (TlbImport.exe).
C. Use the Regsvr32 tool.
D. Ensure thet the application is registered, using the RegSvr tool if necessary. Then either add a reference to it from the COM tab of the Add Reference dialog box or use TblIpm.exe.

Answer: ABD
Section: (none)

Explanation/Reference:

QUESTION 24
What types of objects derive from te MemberInfo class? (Chose all that applay.)

A. FieldInfo class
B. MethodInfo class
C. Assembly class
D. Type class

Answer: ABD
Section: (none)

Explanation/Reference:

QUESTION 25
When compressing data with the DeflateStream class, how do you specify a stream into which to write compressed data?

A. Set the BaseStream property with the destination stream, and set the CompressionMode property to Compression.
B. Specify the stream to write into the DeflateStream object is created (for example, in the constructor).
C. Use the Write method of the DeflateStream class.
D. Register for the BaseSream event of the DeflateStream class.

Answer: B
Section: (none)

Explanation/Reference:

QUESTION 26
Where can you add to a LinkedList? (Choose all that apply)

A. At the begining of the LinkedList
B. Before any specific node
C. After any specific node
D. At the and of the LinkedList
E. At any numeric index in the LinkedList

Answer: ABCD
Section: (none)

Explanation/Reference:

QUESTION 27
Which event would you use to run a method immediately after serialization occurs?

A. OnSerializing
B. OnDeserializing
C. OnSerialized
D. OnDeserialized

Answer: C
Section: (none)

Explanation/Reference:

QUESTION 28
You need to write a code segment that will add a string named strConn to the connection string section of the application configuration file. Which code segment should you use?

A. Configuration myConfig = ConfigurationManager.OpenExeConfiguration(ConfigurationUserLevel.None);
myConfig.ConnectionStrings.ConnectionStrings.Add(new ConnectionStringSettings("ConnStr1", strConn));
myConfig.Save();

B. Configuration myConfig =ConfigurationManager.OpenExeConfiguration(ConfigurationUserLevel.None);
myConfig.ConnectionStrings.ConnectionStrings.Add(new ConnectionStringSettings("ConnStr1",strConn));
ConfigurationManager.RefreshSection("ConnectionStrings");

C. ConfigurationManager.ConnectionStrings.Add(new ConnectionStringSettings("ConnStr1",strConn));
ConfigurationManager.RefreshSection("ConnectionStrings");

D. ConfigurationManager.ConnectionStrings.Add(new ConnectionStringSettings("ConnStr1",strConn));
Configuration myConfig = ConfigurationManager.OpenExeConfiguration(ConfigurationUserLevel.None);
myConfig.Save();

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 29
You are developing an application that uses role-based security. The prinicipal policy of the application domain is configured during startup with the following code:

```
AppDomain.CurrentDomain.SetPrincipalPolicy(PrincipalPolicy.WindowsPrincipal);
```

You need to restrict access to one of the methods in your application so that only members of the local Administrators group can call the method.

Which attribute should you place on the method?

A. `[PrincipalPermission (SecurityAction.Demand, Name = @"BUILTIN\Administrators")]`
B. `[PrincipalPermission (SecurityAction.Demand, Role = @"BUILTIN\Administrators")]`
C. `[PrincipalPermission (SecurityAction.Assert, Name = @"BUILTIN\Administrators")]`
D. `[PrincipalPermission (SecurityAction.Assert, Role = @"BUILTIN\Administrators")]`

Answer: B
Section: (none)

Explanation/Reference:

QUESTION 30

You work as the application developer at Cer-Tech.com. Cer-Tech.com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 text manipulation application. You make use of the code below in your application:

```
Dim ckBuilder As StringBuilder = New StringBuilder (":string:")
Dim b() As Char = {"a"c, "b"c, "c"c, "d"c, "e"c, "f"c, "g"c}
Dim ckWriter As StringWriter = New StringWriter (ckBuilder)
ckWriter.Write (b, 0, 3)
Console.WriteLine (ckBuilder)
ckWriter.Close ()
```

You are required to select from the following what the output will be when you execute the application.

What should you do?

A. string:abcdefg

B. abc:string

C. abcstring

D. string:abc

Answer: D
Section: (none)

Explanation/Reference:

QUESTION 31

Which class would you use to programmatically access the connection strings stored in the following configuration file?

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
 <connectionStrings>
  <clear/>
  <add name="AdventureWorksString"
      providerName="System.Data.SqlClient"
      connectionString="Data Source=localhost;Initial Catalog=AdventureWorks; Integrated Security=true"/>
  <add name="MarsEnabledSqlServer2005String"
      providerName="System.Data.SqlClient"
      connectionString="Server=Aron1;Database=pubs;Trusted_Connection=True;MultipleActiveResultSets=true" />
  <add name="OdbcConnectionString"
      providerName="System.Data.Odbc"
      connectionString="Driver={Microsoft Access Driver (*.mdb)};Dbq=C:\adatabase.mdb;Uid=Admin;Pwd=R3m3emberToUseStrongPasswords;"/>
 </connectionStrings>
</configuration>
```

A. ConfigurationManager.ConnectionStrings

B. ConfigurationProperty.ConnectionStrings

C. ConfigurationSettings.ConnectionStrings

D. ConfigurationSection.ConnectionStrings

Answer: A
Section: (none)

Explanation/Reference:

Use ConfigurationManager.ConnectionStrings to access database connection strings.

ConfigurationSettings is obsolete.

ConfigurationSection does not have a ConnectionStrings property.

ConfigurationProperty does not have a ConnectionStrings property.

QUESTION 32

Which of the following commands adds the App.exe assembly to the full trust list for the machine policy?

A. Caspol -machine -addfulltrust App.exe

B. Caspol -machine -addgroup Full_Trust App.exe

C. Caspol -user -addfulltrust App.exe

D. Caspol -user -addgroup Full_Trust App.exe

Answer: A
Section: (none)

Explanation/Reference:

the -machine and -addfulltrust arguments with the Caspol.exe command-line tool to add an assembly to the full trust list for the machine polic

-user argument adds the assembly to the user full trust list, not the machine full trust list.

cannot use the -addgroup argument to add an assembly to the full trust list.

QUESTION 33

You are creating a class that responds to serialization events. Which of the following classes will trigger the serialization events?

A. BinaryFormatter

B. SoapFormatter

C. XmlSerializer

D. IFormatter

Answer: A
Section: (none)

Explanation/Reference:

Only the BinaryFormatter class supports serialization events.

The SoapFormatter class does not support serialization events.

XMLSerializer does not support serialization events.

IFormatter is an interface and cannot be directly used to perform serialization.

QUESTION 34

You are writing an application that communicates with a database. The connection string is stored in the application configuration file. Which of the following string?

A.
```
'VB
ConfigurationManager.ConnectionStrings.ConnectionString

// C#
ConfigurationManager.ConnectionStrings.ConnectionString
```

B.
```
'VB
ConfigurationSettings.ConnectionStrings.ConnectionString

// C#
ConfigurationSettings.ConnectionStrings.ConnectionString
```

C.
```
'VB
ConfigurationManager.ConnectionStrings(0).ConnectionString

// C#
ConfigurationManager.ConnectionStrings[0].ConnectionString
```

D.
```
'VB
ConfigurationSettings.ConnectionStrings(0).ConnectionString

// C#
ConfigurationSettings.ConnectionStrings[0].ConnectionString
```

Answer: C
Section: (none)

Explanation/Reference:

ConfigurationManager.ConnectionStrings is a collection of type ConnectionStringSettingsCollection that contains the connection strings loaded from the appli collection, you must access it using an index. ConfigurationSettings, which is obsolete, does not contain a ConnectionStrings property.

Exam Objective:
Embedding configuration, diagnostic, management, and installation features into a .NET Framework application

Exam SubObjective(s):
Embed configuration management functionality into a .NET Framework application. (Refer System.Configuration namespace) Configuration class and Configu

QUESTION 35

Which of the following configuration files correctly defines the information required to connect to a database by defining the first element of ConfigurationMan other configuration files that might exist?

A.
```
<?xmlversion="1.0" encoding="utf-8"?>
<configuration>
 <connectionStrings>
  <clear/>
  <add name="System.Data.SqlClient"
  providerName="AdventureWorksString"
  connectionString="Data Source=localhost;Initial Catalog=AdventureWorks;
  Integrated Security=true"/>
 </connectionStrings>
</configuration>
```

B.
```
<?xmlversion="1.0" encoding="utf-8"?>
<configuration>
 <connectionStrings>
  <add name="System.Data.SqlClient"
  providerName="AdventureWorksString"
  connectionString="Data Source=localhost;Initial Catalog=AdventureWorks;
  Integrated Security=true"/>
 </connectionStrings>
</configuration>
```

C.
```
<?xmlversion="1.0" encoding="utf-8"?>
<configuration>
 <connectionStrings>
  <add name="AdventureWorksString"
  providerName="System.Data.SqlClient"
  connectionString="Data Source=localhost;Initial Catalog=AdventureWorks;
  Integrated Security=true"/>
 </connectionStrings>
</configuration>
```

D.
```
<?xmlversion="1.0" encoding="utf-8"?>
<configuration>
 <connectionStrings>
  <clear/>
  <add name="AdventureWorksString"
  providerName="System.Data.SqlClient"
  connectionString="Data Source=localhost;Initial Catalog=AdventureWorks;
  Integrated Security=true"/>
 </connectionStrings>
</configuration>
```

Answer: D
Section: (none)

Explanation/Reference:

To define the first element of ConfigurationManager.ConnectionStrings, you must include the <clear/> element, which removes any existing <connectionStrin
providerName attribute to the database type, such as System.Data.SqlClient. The Name element is a friendly name used to refer to that specific connection s

Exam Objective:
Embedding configuration, diagnostic, management, and installation features into a .NET Framework application

Exam SubObjective(s):
Embed configuration management functionality into a .NET Framework application. (Refer System.Configuration namespace) Configuration class and Configu

QUESTION 36

You are writing a multithreaded application, and multiple threads need to read and write the same file. At times, a thread will need to read from the file, and th
most efficient way to handle this in the thread?

A.
1. Create a ReaderWriterLock object, and call ReaderWriterLock.AcquireReadLock.
2. Perform the reads.
3. Call ReaderWriterLock.UpgradeToWriterLock, and perform the writes.

B.
1. Create a ReaderWriterLock object, and call ReaderWriterLock.AcquireReadLock.
2. Perform the reads.
3. Call ReaderWriterLock.ReleaseReaderLock.
4. Call ReaderWriterLock.AcquireWriteLock, and perform both the writes.

C.
1. Create a ReaderWriterLock object, and call ReaderWriterLock.AcquireReadLock.
2. Perform the reads.
3. Call ReaderWriterLock.ReleaseLock.
4. Call ReaderWriterLock.AcquireWriteLock, and perform both the writes.

D.
1. Create a ReaderWriterLock object, and call ReaderWriterLock.AcquireWriteLock.
2. Perform both the reads and the writes.

Answer: A
Section: (none)

Explanation/Reference:

The most efficient way to switch from a read lock to a write lock is to call ReaderWriterLock.UpgradeToWriterLock.

You cannot read when you have a write lock.

Although you can release a read lock and acquire a write lock, it is not as efficient as using UpgradeToWriterLock.

QUESTION 37

You work as the application developer at Cer-Tech.com. You make use of Visual Studio 2005 as your application development platform.
You are developing a .NET Framework 2.0 application and write the code below as your own code:

```
Public Class Book
Public Name As String
End Class
Public Class Library
<XmlAray("ID1")> _
<XmlArayItem("ID2")> _
Public Book As Book()
End Class
```

You are required to create an object of the Library type and serialize it to disk in a file named Certkiller books.xml and write the following code:

```
Dim books As Book() = New Book() {New Book(), New Book(), New Book()}
books(0).Name = "Book Name 1"
books(1).Name = "Book Name 2"
books(2).Name = "Book Name 3"
Dim library As Library = New Library()
library.Books = books
Dim ckSerializer As XmlSerializer = New XmlSerializer(GerType(library))
Using ckWriter As StreamWriter = New StreamWriter(" Certkiller books.xml")
ckSerializer.Serialize(ckWriter, library)
End Using
```

You are required to choose from the following selection which output will be generated by the program.

What should you do?

A.

```
<Library>
<ID1>
<Book>
<ID2>Book Name 1</ID2>
</Book>
<Book>
<ID2>Book Name 2</ID2>
</Book>
<Book>
<ID2>Book Name 3</ID2>
</Book>
</ID1>
</Library>
```

B.

```
<Library>
<Books>
<ID1>
<ID2>Book Name 1</ID2>
</ID1>
<ID1>
<ID2>Book Name 2</ID2>
</ID1>
<ID1>
<ID2>Book Name 3</ID2>
</ID1>
</Books>
</Library>
```

C.
```
<Library>
<ID2>
<ID1>
<Name>Book Name 1</Name>
</ID1>
<ID1>
<Name>Book Name 2</Name>
</ID1
<ID1>
<Name>Book Name 3</Name>
</ID1>
</ID2>
</Library>
```

D.
```
<Library>
<ID1>
<ID2>
<Name>Book Name 1</Name>
</ID2>

<ID2>
<Name>Book Name 2</Name>
</ID2>
<ID2>
<Name>Book Name 3</Name>
</ID2>
</ID1>
</Library>
```

Answer: D
Section: (none)

Explanation/Reference:

QUESTION 38

You work as an application developer at Cer-Tech.com. The Cer-Tech.com network contains an application server named Server01.

You have been asked to profile a business application that can be accessible using the Event Log API. You want to achieve this by creating a custom event log on Server01.

What should you do?

A. Use the following code:

```
EventLog.CreateEventSource ("Application1", "Profile", "Server01");
```

B. Use the following code:

```
EventLog.CreateEventSource ("Application1", "Profile");
```

C. Use the following code:

```
EventSourceCreationData sourceData = new EventSourceCreationData
("Application1","Profile");
sourceData.MachineName = "Server01";
EventLog.CreateEventSource (sourceData);
```

D. Use the following code:

```
EventSourceCreationData sourceData = new EventSourceCreationData
("Application1","Profile");
EventLog.CreateEventSource (sourceData);
```

Answer: C
Section: (none)

Explanation/Reference:

QUESTION 39

You need to notify the user if your assembly is running without the ability to use HTTP to download assemblies. How can you determine whether you have that permission?

A. Examine AppDomain.CurrentDomain.SetupInformation.DisallowCodeDownload.

B. Examine AppDomain.CurrentDomain.DisallowCodeDownload.

C. Examine AppDomain.CurrentDomain.SetupInformation.DisallowPublisherPolicy.

D. Examine AppDomain.CurrentDomain.DisallowPublisherPolicy.

Answer: A

Section: (none)

Explanation/Reference:

QUESTION 40

Which method is appropriate to specify a password when starting a process?

A. Use a String variable that contains the password.

B. Use an Array of type Char

C. Use an Array of type String coupled with an Integer reference to the password's index in the array.

D. Use a SecureString object.

Answer: D
Section: (none)

Explanation/Reference:

QUESTION 41

You work as the application developer at Cer-Tech.com. Cer-Tech.com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 application and are busy creating a default instance of the Rijndael symmetric algorithm class and configure it with a key that is generated from a password. The following code you wrote, line numbers are for reference only:

```
01: Dim dubl As Double = 0
02: Dim salt(16) As Byte
03: Dim pwdDeBytes As PasswordDeriveBytes = New PasswordDeriveBytes (pwd, salt)
04: Dim key As Byte() = pwdDeBytes.GetBytes(16)
05: Dim cryptoRij As Rijndael = Rijndael.Create ()
06: cryptoRij.Key = key
```

The variable that is named salt acts as a seed to the key derivation algorithm. You are required to insert additional code before line 03 that stores a random number in the salt variable.

What code segment should you add?

A.
```
Dim rNum As RandomNumberGenerator = RandomNumberGenerator.Create ()
rNum.GetBytes (salt)
```

B.
```
Dim ckGuid as Guid = New Guid ()
salt = ckGuid.ToByteArray()
```

C.
```
Dim enc as Encoding = New ASCIIEncoding ()
salt = enc.GetBytes(DateTime.Now.ToString())
```

D.
```
Dim rNum as Random = New Random ()
rNum.NextBytes (salt)
```

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 42

. You are creating a generic class, and you need to dispose of the generic objects. How can you do this?

A. Call the Object.Dispose method.

B. Implement the IDisposable interface.

C. Derive the generic class from the IDisposable class.

D. Use constraints to require the generic type to implement the IDisposable interface.

Answer: D
Section: (none)

Explanation/Reference:

QUESTION 43

What values of the AssemblyBuilderAccess enumeration allow you to execute the assembly?

A. AssemblyBuilderAccess.Run

B. AssemblyBuilderAccess.ReflectionOnly

C. AssemblyBuilderAccess.RunAndSave

D. AssemblyBuilderAccess.Save

Answer: AC
Section: (none)

Explanation/Reference:

QUESTION 44

You work as the application developer at Cer-Tech.com. Cer-Tech.com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 Windows application. You are required to asynchronously monitor the creation of new Windows processes and write the following code:

```
Dim eQuery As WqlEventQuery = New WqlEventQuery ("__InstanceCreationEvent",
 _New TimeSpan (0, 0, 5), "TargetInstance is a ""Win32_Process""")
Dim meWatcher As ManagementEventWatcher = New ManagementEventWatcher ()
meWatcher.Query = eQuery
```

You are in the process of adding additional code for the asynchronous monitor to work and need to know which code segment to use.

What code segment should you use? (Each correct answer presents part of the solution. Choose TWO)

A. meWatcher.Stop ()

B. Dim mObj As ManagementBaseObject = meWatcher.WaitForNextEvent ()

C. AddHandler meWatcher.EventArrived, AddressOf Process_Created

D. meWatcher.Start ()

Answer: CD
Section: (none)

Explanation/Reference:

QUESTION 45

Which of the following is a class would you need to create an instance of to specify that a string should be centered when drawn?

A. StringFormat

B. StringAlignment

C. FormatFlags

D. LineAlignment

Answer: A

Section: (none)

Explanation/Reference:

QUESTION 46

Which of the following are keyed hashing algorithms? (Choose all that apply.)

A. RIPEMD160

B. HMACSHA1

C. SHA512

D. MACTripleDES

E. MD5

Answer: BD
Section: (none)

Explanation/Reference:

QUESTION 47

You work as the application developer at Cer-Tech.com. Cer-Tech.com uses Visual Studio.NET 2005 as its application development platform.
You are developing a .NET Framework 2.0 assembly using the code shown below:

```
Public NotInheritable Class UtilProc
Public Sub DoWork()
' Additional code to go here
End Sub
End Class
```

The code is capable of being called by a Web application or Web service. You are required to restrict the assemblies that are capable of calling the DoWork method so only assemblies signed with a specific public key should be able to call the DoWork method.

What should you do?

A. SecurityAction.LinkDemand should be passed as a parameter to the attribute

B. The StrongNameIdentityPermission attribute should be applied to the DoWork method

C. SecurityAction.InheritanceDemand should be passed as a parameter to the attribute

D. The SecurityAction.Demand should be passed as a parameter to the attribute

E. The GacIdentityPermission should be applied to the DoWork method

F. The KeyContainerPermission should be applied to the DoWork method

Answer: AB
Section: (none)

Explanation/Reference:

QUESTION 48
Which permission must an assembly have to connect to a Web server?

A. SocketPermission

B. WebPermission

C. DnsPermission

D. ServiceControllerPermission

Answer: B
Section: (none)

Explanation/Reference:

QUESTION 49
Which of the following would you use within a method to throw an exception if the assembly lacked a specific privilege?

A. SecurityAction.Demand

B. SecurityAction.Deny

C. SecurityAction.Assert

D. SecurityAction.RequestMinimum

Answer: A
Section: (none)

Explanation/Reference:

QUESTION 50

You work as an application developer at Cer-Tech.com. You are in the process of creating an assembly that will be used to manage file content on Cer-Tech.com's user computers.

Cer-Tech.com wants you to ensure that the users who use the assembly you are creating should not be able to access classes in your assembly if they do not have access to the local file system.

To do this, you need to add certain code fragments to your classes. What should you use? (Choose two)

A.
```
[FileIOPermission (SecurityAction.RequestMinimum) ]
```

B.
```
FileIOPermission perm = New FileIOPermission (PermissionState.Unrestricted);
Perm.Assert
```

C.
```
[FileIOPermission (SecurityAction.RequestOptional) ]
```

D.
```
FileIOPermission perm = New FileIOPermission (PermissionState.Unrestricted);
Perm.Request
```

E.
```
[FileIOPermission (SecurityAction.Demand) ]
```

F.
```
FileIOPermission perm = New FileIOPermission (PermissionState.Unrestricted);
Perm.Demand
```

Answer: EF
Section: (none)

Explanation/Reference:

QUESTION 51

You write the following code segment to call a function from the Win32 Application Programming Interface (API) by using platform invoke.
string personName = "N?el";
string msg = "welcome " + personName + "to club"!;
bool rc = User32API.MessageBox(0, msg, personName, 0); You need to define a method prototype that can best marshal the string data.
Which code segment should you use?

A.
```
[DllImport("user32", CharSet = CharSet.Ansi)]
public static extern bool MessageBox(int h Wnd, String text,
String caption, unit type);
```

B. [DllImport("user32", EntryPoint = "MessageBoxA", CharSet = CharSet.Ansi)]
public static extern bool MessageBox(int hWnd, [MarshalAs(UnmanagedType.LPWStr)]String text,
[MarshalAs(UnmanagedType.LPWStr)]
String caption, unit type);

C. [DllImport("user32", CharSet = CharSet.Unicode)]
public static extern bool MessageBox(int h Wnd, String text, String caption, unit type);

D. [DllImport("user32", EntryPoint = "MessageBoxA", CharSet = CharSet.Unicode)]
public static extern bool MessageBox(int hWnd, [MarshalAs(UnmanagedType.LPWStr)]String text,
[MarshalAs(UnmanagedType.LPWStr)]
String caption,unit type);

Answer: C
Section: (none)

Explanation/Reference:
· Achtung: CharSet = CharSet.Unicode wird empfohlen, da in C# CharSet.Auto eventuell Probleme macht.

· CharSet.Ansi ist natürlich fasch (string in C# ist Unicode)

QUESTION 52
A fellow developer named Andy Booth has recently created an application.
The application receives confidential transaction data from Certkiller .com's clients, which it secures using the TripleDESCryptoServiceProvider class.
You are currently reviewing this application, and need to decrypt a byte array of cipher text.
What code should you use to achieve this objective?

A. public byte [] DecryptData(byte [] cipherText, TripleDESCryptoServiceProvider secretKey){
MemorySream ms = new MemorySream(cipherText);
CryptoSream cs = new CryptoSream(ms, SecretKey, CryptoSreamMode.Read);
byte [] data = new byte [ms.Length - 1];
cs.Read (data, 0, data.Length);
cs.Close ();
ms.Close ();
return data;
}

B. public byte [] DecryptData(byte [] cipherText, TripleDESCryptoServiceProvider secretKey){
MemorySream ms = new MemorySream (cipherText);
CryptoSream cs = new CryptoSream(ms, secretKey.CreateDecryptor(), CryptoSreamMode.Read);
byte [] data = new byte [ms.Length - 1];
cs.Read (data, 0, data.Length);
cs.Close ();
ms.Close ();
return data;
}

C. public byte [] DecryptData(byte [] cipherText, TripleDESCryptoServiceProvider secretKey){
MemorySream ms = new MemorySream (secretKey);
CryptoSream cs = new CryptoSream(ms, secretKey.CreateDecryptor(), CryptoSreamMode.Read);
byte [] data = ms.Decrypt (cipherText);
cs.Read (data, 0, data.Length);
ms.Close ();
return data;
}

D. public byte [] DecryptData(byte [] cipherText, TripleDESCryptoServiceProvider secretKey){
CryptoSream cs = new CryptoSream (secretKey);
byte [] data = ms.Decrypt (cipherText);
cs.Read (data, 0, data.Length);
ms.Close ();
return data;
}

Answer: B
Section: (none)

Explanation/Reference:
This code instantiates a CryptoStream object, specifies the ICryptoTransform object to encrypt data, decrypts the CipherText byte array,
and returns the encrypted byte array.
The TripleDESCryptoServiceProvider class represents a managed cryptographic provider of the
Data Encryption Standard (DES) symmetric algorithm.
The DES symmetric algorithm is commonly used for dat confidentiality, and it supports 64- bit keys.
When you instantiate a TripleDESCryptoServiceProvider object, a secret key for encryption and an initialization vector (IV) are created.
Because the same key and IV are needed for encryption and decryption, the CreateEncryptor and CreateDecryptor methods
generate the appropriate ICryptoTransform object to alter the data.

Incorrect Answers:
A: You should not use the code that does not invoke the CreatDecryptor method because this is required when instantiating a CryptoStream object.
C, D: You should not use the code fragments that invoke the Decrypt method because no such method exists in the CryptoStream class.

· Tipp:
· CryptoSream cs = new CryptoSream(ms, secretKey.CreateDecryptor(), CryptoSreamMode.Read);
· ist der einzige korrekte Konstruktor (C wurde ausgebessert).

· Methode Read und nicht Decrypt - schon gar nicht von MemoryStream !!!

· public CryptoStream (Stream stream, ICryptoTransform transform, CryptoStreamMode mode)
· transform: Die kryptografische Transformation, die für den Stream ausgeführt werden soll. (SecretKey. CreateEncryptor())

· die verschiedenen XXXCryptoServiceProvider haben alle eine Methode CreateEncryptor bzw. CreateDecryptor.

QUESTION 53
You are developing an application to perform mathematical calculations.
You develop a class named CalculationValues.
You write a procedure named PerformCalculation that operates on an instance of the class.
You need to ensure that the user interface of the application continues to respond while calculations are being performed.
You need to write a code segment that calls the PerformCalculation procedure to achieve this goal.
Which code segment should you use?

A. private void PerformCalculation() {...}
 private void DoWork(){
 CalculationValues myValue = new CalculationValues();
 Thread newThread = new Thread(new ThreadStart(performCalculation));
 newThread.Start(myValues);
 }
B. private void PerformCalculation() {...}
 private void DoWork(){
 CalculationValues myValue = new CalculationValues();
 ThreadStart delStart = new ThreadStart(PerformCalculation);
 Thread newThread = new Thread(delStart);
 if (newThread.IsAlive) {newThread.Start(myValue);}
 }
C. private void PerformCalculation (CalculationValues values) {...}
 private void DoWork(){
 CalculationValues myValue = new CalculationValues();
 Application.DoEvents();
 PerformCalculation(myValue);
 Application.DoEvents();
 }
D. private void PerformCalculation(object values) {...}
 private void DoWork(){
 CalculationValues myValues = new CalculationValues();
 Thread newThread = new Thread(new ParameterizedThreadStart(PerformCalculation));
 newThread.Start(myValues);
 }

Answer: D
Section: (none)

Explanation/Reference:
Explanation: It is a requirement that the UI continues to respond, hence PerformCalculation should execute in a separate thread.
PerformCalculation requires a parameter hence you should use the ParameterizedThreadStart delegate.

A& B attempt to supply a parameter to the ThreadStart delegate. This is not possible.

C Does not run in a new thread and hence may leave the UI unresponsive.

· Warum ist es sicher, dass Parameter benötigt werden (geht aus der Angabe nicht hervor) !!!